May 1960

The Office

Magazine of Management · Equipment · Methods

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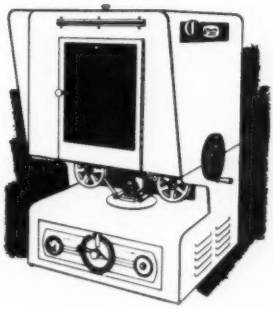

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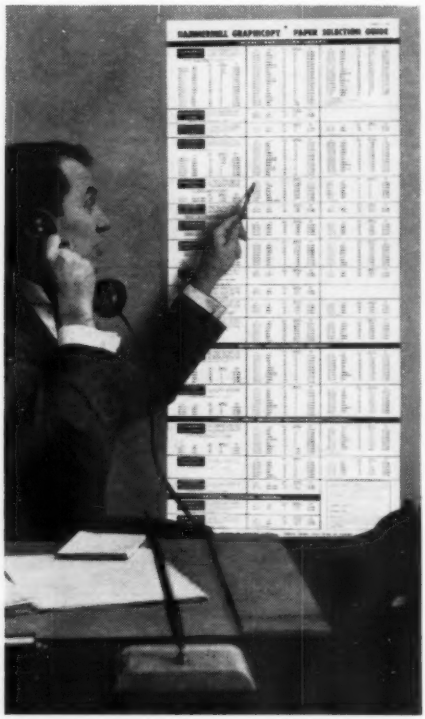

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The Office
Magazine of Management Information Methods

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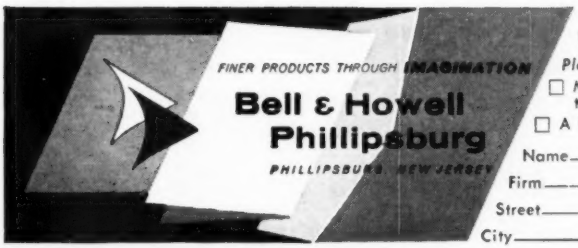

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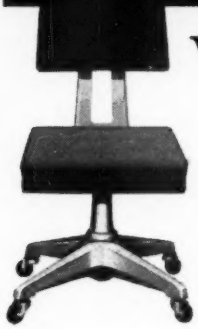

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When you write, you have no opportunity to re-phrase the subject for the reader who doesn't understand you. Once your words are down on paper, you don't get a chance to explain what you mean in another way. You can't tell whether your ideas are "getting across" to your reader or not.

You're more likely to get across in your business writing if you can increase your "interest factor." A lot of words won't do it.

There are writers who write to be writing . . . who know how to spew forth words — sometimes very long words. Then there are writers who try to make themselves understood. If people don't understand what you write, you are a failure as a writer.

During World War II one of those writers who like to spew forth words wrote up these instructions. They were to be issued as a presidential directive:

> Such preparations shall be made as will completely obscure all Federal buildings and non-Federal buildings during an air raid for any period of time from visibility by reason of internal or external illumination. Such obscuration may be obtained either by blackout construction or by termination of the illumination. This will, of course, require that in building areas in which production must continue during the blackout, construction must be provided that internal illumination may continue. Other areas, whether or not occupied by personnel, may be obscured by terminating the illumination.

Franklin D. Roosevelt, who had effective command over words, told the writer to re-write it. He said:

> Talk to them like they were people. Tell them, in buildings where they have to keep the work going, to put something across the windows; in buildings where they can afford to let the work stop awhile, to turn out the lights.

Can we, as business writers, learn anything from the successful fiction writer? I think we can. Business writing tends to be dull. Fiction writing tends to be interesting. Why?

Does business writing *have* to be dull? Perhaps we can never make it as interesting as fiction, but our question is one of degree. Can we make business writing more interesting than most of it is now? And thus more useful?

The fiction writer uses one very effective device: people. People — men and women—permeate his writing. If putting people in your writing is a proven way to add interest, and clearness, why not go ahead and put people into your business writing?

Most systems documents, for ex-

in Your Writing

ample, are written as though people didn't exist; as though flesh and blood played no role in the execution of the system plan. That isn't so. Why do we pretend that there are no people? Actually people are everything to an organization. Men and women make a procedure go. They do the work and make most of the decisions.

What is an organization but people? We have plural people and singular people. The *clerk* is singular. The *order department* is plural. Our organizations are full of people, such as clerk, secretary, accountant, programer, boss, manager, salesman, machinist, truck driver, auditor and even systems men. We have people in the plural, too: accounting department, sales, production, shipping, claims, engineering, research or warehousing. All are people. Why try to hide them, and make your writing dull?

Admit that people exist. Show the people. Tell what they do in the system. In other words, don't cover up what people are doing in the system. Make this shine out.

People attract people. A big oil company, with a chain of gas service stations, insists that at least one employee be seen outside the station during all working hours. This rule applies even when there is no business in the station. The man is to keep himself busy at some kind of work outdoors where people can see him. He may work on a car, polish the pumps, or sweep the sidewalk. By testing, the company found that when an auto driver is looking for a gas station, he is more likely to drive in where he sees a man on the premises, ready to serve him.

Here is an actual example of *peopleless* business writing:

> It is an individual responsibility borne by those possessing classified documents to determine that each document has been assigned a control number and that all documents irrespective of date are channeled through the cognizant control center when possession responsibility is to be transferred to determine that each document has been assigned a control number and that all documents, irrespective of date, are channeled through the cognizant control center when they are re-assigned to an individual outside the current control center area.

Here is the same passage, re-written to let people show through:

> Each person who has classified papers makes sure that they have control numbers.
>
> Each person having such papers, of any date, sends them to his control center clerk when he wants to send them to someone who works in an area covered by another control center.

So let's put people in our procedures, in our policy statements, and in all our business writing. Since people attract people, let's take a lesson from that oil

(Continued on page 191)

Records Management with a Positive Approach

J. M. THOM, Goodyear Atomic Corp., Portsmouth, Ohio

GOODYEAR ATOMIC was formed in 1952 to operate a to-be-constructed uranium separation plant for the Atomic Energy Commission in Pike County, Ohio. In just the three years of construction, records amounted to almost 10,000 cu. ft. of paper. Though records center groups operated during this period, fear that information would not be available when needed fostered private records collections.

The initial problem was not cost reduction, but organizing the records. It seems to me, based on our experience, that if records are organized to make information easily available, costs are inevitably reduced. The traditional approach to records management has been to accent the negative. The sole objective was elimination or destruction. To retain any records was a defect to tolerate, but not condone. This made records management just a housekeeping project. Many people, including some top executives, look upon the record manager's scheduling of records for destruction as a direct reflection on the calibre of their management. To attack the files is to attack the person. It is

Central files service office on the lower floor of the two-story fireproof vault at Goodyear Atomic Corp.

A-1028 (10-55) REV.

RECORDS INVENTORY FORM

1. DEPT. 411	2. PERSON INTERVIEWED Benner	3. POSITION Super.
4. DATE 9-10-56	5. SUBJ. CODE NO. 09 R50	6. FILE TITLE Requisitions
7. FORM NO(S): A-30	8. CLASSIFICATION: SECRET ____ CONF. ____ BUS. C. ____ UNCL. ✓	
	9. KIND OF COPY: Carbon	10. ARRANGEMENT ____ CHRONOLOGICAL ____ ALPHABETICAL ____ NONE ____ SUBJECT ✓ NUMERICAL
	11. POINT OF ORIGIN: Various	12. LOCATION OF COMPLETE FILE: 411

13. FLOW SCHEDULE (FORMS): ____ NONE ✓ SEE REVERSE

14. PHYSICAL CHARACTERISTICS:

8½ x 11 SHEET SIZE 540 LIN. IN. 30 CU. FT. 1953- PRESD. COVERED ANTICIPATED GROWTH 180 IN./YR.

15. CONTENT:

Requisitions of equipment, material and services requested by groups, approved by authorized personnel. (See Flow Schedule)

16. PURPOSE AND USE:

Informational and control copy: Maintained in accordance with AEC requirements. Original copy included in P.O. folder.

17. VALUE COMMENTS OF

REC.	NON R.		RETENTION SCHEDULE: IN DEPT.	IN FILES	TOTAL
	✓	HOLDING OR GENERATING DEPT.	1 YR. MO.	0 YR. MO.	1 YR.
	✓	AEC (CH. 0230)			YR.
	✓	RECORDS MANAGEMENT 411	1 YR. MO.	0 YR. MO.	1 YR.
	✓	CORPORATION	1 YR. MO.	0 YR. MO.	1 YR.

18. RECOMMENDATIONS

A. RETENTION PERIODS IN:

DEPT. 1 YR. ____ MO. RECORDS MGT. 0 YR. ____ MO. TOTAL 1 YRS.

B. DESTRUCTION AND HANDLING:

DESTROY IN DEPT. ✓ SEND TO 644 FOR DESTRUCTION ____

C. COMMENTS:

Requisition log book can be used as a control instrument. (Clearly describe in AEC submission)

This form is used to make a folder-by-folder inventory of each department's files.

Summary sheets, prepared from the records inventory forms, are submitted to each department's supervisor for approval.

difficult to avoid an antagonistic interpretation of the intention of a records manager who is zealously bent on destruction. We might as well reconcile ourselves to the fact that paperwork and paper-

A-1044(12-56) REV.

RECORDS INVENTORY SUMMARY

PAGE 1 OF 3

FILE MAINTENANCE INSTRUCTIONS FOR D-411

FILE CODE	FILE TITLE	LINEAR INCHES	PERIOD COVERED	COMMENTS	RESPON'BLE DEPT.	RC AEC SCHED. NO.	NRC	RETENTION PERIOD IN DEPT.	644	TOTAL	DATE OF TRANS.	DSTRY. IN
	FILE ROOM											
09 P95	Purchase Orders (A-31, A-32)	912.0	1953-Present	Case file	411	4-2a		1	5	6	Mar.	544
	TYPING ROOM											
09 V30	Vendor File, "A" to "Z" (A-31, A-28)	50.0	1953-Present	Expediter's copy	411	4-2b		1	0	1	-	411
09 R50	Requisition File (A-30)	400.0	1953-Present	Duplicate copy	411		X	1	1	2	-	411
	"A" to "Z" Index Cards	25.0	1953-Present	Vendors names & addresses	411		X	WA	-	-	-	411
	Correspondence "A" to "Z"	300.0	1953-Present									
09 V30	1) Correspondence re request for catalogs from vendors				411	4-1		2	0	2	-	411
	2) Inquiries re P.O.'s			File with P.O.	411							
	3) Telegrams of same nature			File with P.O.	411							
11 T75 S34	4) Copies of A-133				422							
06 A40	Manifests	2.0	1953-Present		311		X	1	0	1	-	411
	EXPEDITERS											
Card file	Excess List Index	3.0	1954-Present	Locator for excess list	411		X	WA	-	-	-	411
09 E90 L61	Excess Property List	6.0	1954-Present		411		X	US	-	-	-	411
09 P95 Case file	Purchase Orders	332.0	1953-Present	Expediters copy	411	4-2b		1	0	1	-	411
09 P95 B56	Blanket Purchase Orders	10.0	Current	Expediters copy	411	4-2b		1	0	1	-	411
09 P95 P95	Purchase Orders (A-31, A-32)	100.0	1953-Present	Expediters copy	411	4-2b		1	0	1	-	411

PREPARED BY D. J. Blanton DATE 12/12/56

APPROVALS OF RECOMMENDATIONS: REC. MGT DEPT. [illegible] DATE 12/12/56 SUPT. DATE

SUPERVISOR R. B. Jones DATE 12/27/56 MGR. M. C. Potts DATE 12/28/56

Rc - 0644

Rev. 2
9-57

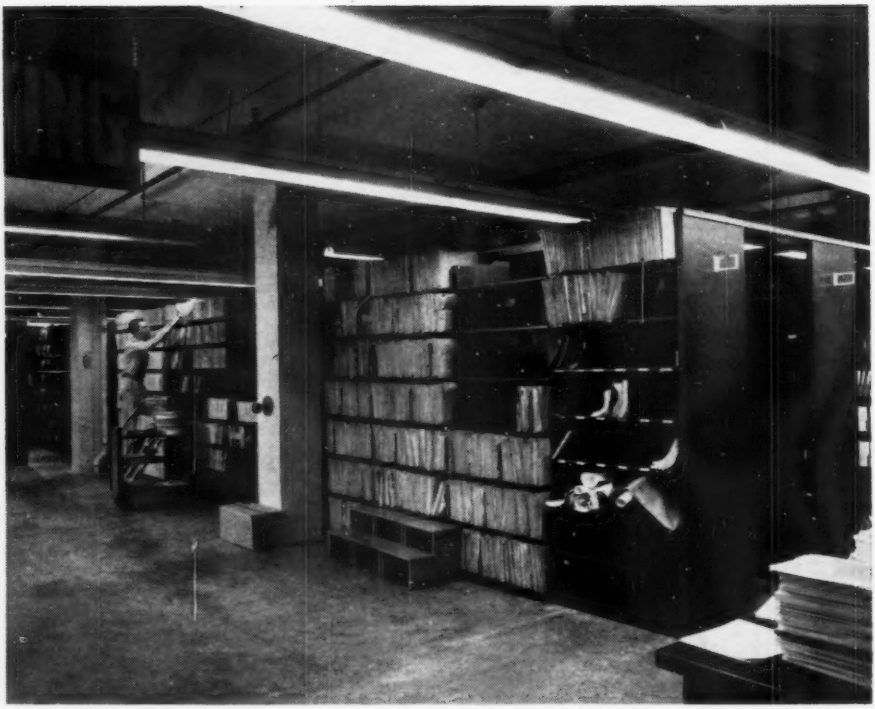
MAIN HEADING PROCUREMENT, RECEIVING, SHIPPING, STORES AND SALES CODE 09 / 4

CODE			FILE HEADINGS	RC OR NRC	RET BY	RETENTION			TRANS ON
SUB HDGS	SUB SUB HDGS					OFC	C.F.	TOT.	
P80			PRIORITIES AND CONTROLLED MATERIALS (Continued)						
	R49		- - Requirements (Cont'd)						
		S72	- - - - Estimated Requirements for Steel, Copper and Aluminum, Form AEC-362 (Supersedes Form AEC 294-7 and CMP-4a)	Rc	401	1y	2y	3y	Sept
P95			PURCHASE ORDER RECORDS - Statements, correspondence, and other data relating to the administration of purchase order issuances.						(R)
	B56		- - Blanket Orders - Statements, correspondence, and other data concerning blanket orders in general	Rc	411	1y	0	1y	-
	B94		- - Business Type Reports, Procurements by	Rc	410	2y	0	2y	-
	F47		- - Petty Cash Purchases	Rc	411	1y	5y	6y	m
	F69		- - Price Escalation - Statements, correspondence, and other data relating to the allowable adjustment of prices.	Rc	401	2y	0	2y	-
	P95F		- - Purchase Order Folder - All data documenting the initiation and administration of procurement transactions consisting of bids, notification of awards, terms and conditions, purchase orders, specifications, requisitions, etc Purchase Order (Negotiated), Form A-31 Purchase Order (Sealed Bid), Form A-32	Rc	411	1y	5y	6y	m

The filing manual contains all the information necessary to put approved or revised records schedules into effect throughout the plant.

work costs will increase. The more automated our industrial production, with more workers being replaced by recording instruments, the more paper. The more scientists and engineers to enter management, the more paper. The scientist-manager needs a great deal of recorded data to make his decisions and formulate his policies.

The spread and duplication of rec-



Records lose all departmental identification after they are transferred to the central files.

ords are not surprising when you consider shifts in organizational responsibilities and interests, and decentralized management. In an organization involved in scientific research and development, the spread and duplication of filed material may be more pronounced. Frequently each of several groups, engaged in exploring aspects of the same problem, will attempt to keep a complete file on the project. The tendency toward duplication is more striking in national defense work. Having to account to government agencies is in large part responsible for the cautious attitude of personnel toward their files.

People who create and maintain files which are out of line with their operational needs continue to disturb records managers. The fight must be waged, too, against those who get a thrill from seeing their names on documents, and like to get on distribution lists for reports, regardless of subject. They are self-appointed information and records centers. But why should the records manager be so concerned over office files as distinguished from corporate or programatic files? I found a great portion, probably 40%, of the paper maintained is personal and non-programatic, when viewed from an over-

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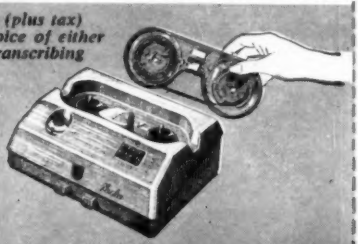

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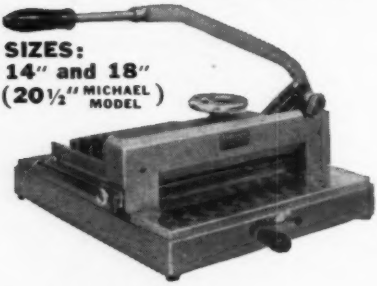

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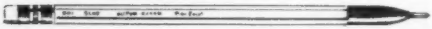

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all company operation standpoint. Moreover, office files ordinarily are more expensive to maintain than programatic or case files.

Fortunately, the cautious attitude of line groups and their consciousness of the need for recorded information can be utilized. Whether their claim of need be legitimate, or purely imaginary, stemming from a protective regard for their files as part of their creative effort, a positive attitude is evident. This can serve as a base for the records management program.

A records program that considers filed material to be necessary information, has for its main objective the integration of files on a company-wide basis. It makes essential information easily accessible and carries out the traditional objective of early disposal of worthless paper. In addition, the program facilitates control of forms, systems and procedures. This positive approach is the one taken here.

Since we operate our gigantic gaseous diffusion process under a cost-type contract with AEC, our files are the property of the government and ownership rights can be applied at discretion of the government. Our administration building has two 8000 cu. ft. records vaults. Established legal authority to dispose of unnecessary records, and the *will* to dispose of them, were at loggerheads. AEC has published retention and disposal schedules, but these cannot be imposed mechanically. Even if the understandable desire of the line groups for "paper security" were not considered, the language of AEC schedules (intended for all organizations in the national atomic energy program) is

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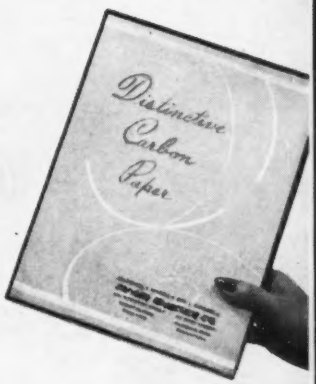

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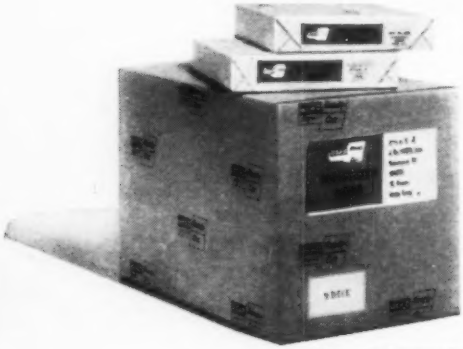

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The engineering records service office has a catalog card file arranged according to subject, source, location and function of equipment.

too general and definitions too inclusive.

Since our greatest problems were attributable to the conservative attitude of line groups, we focused attention on their needs and emphasized direct service. We formulated as our objectives:

1. To make easily accessible all essential recorded information created and maintained by the company.
2. To safeguard company records in

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compliance with our AEC contract and other legal requirements.

3. To transfer inactive records to records centers for service and safe, low-cost storage.

4. To dispose of unneeded records.

The savings objective was de-emphasized in most announcements. If the first objective could be accomplished, savings were sure to follow. To make recorded information available, two choices were open: (1) establish centralized control over all records with ultimate responsibility resting solely in the records management department; or (2) have an integrated filing program with responsibility for its operation shared jointly by the records management department and line groups.

The first alternative was rejected because its dictatorial slant made it contrary to the ordinary working habits of our company. Also, it might have been considerably more expensive and might have stimulated "bootleg" office files. The second alternative would secure line group cooperation and participation while allowing the records management department to set up clearly defined policies and efficient procedures and insure their being followed.

The records management department, with the help of a group of secretaries to top company executives, developed a plant-wide filing manual which designates the location of a record file, lists authorized file titles in subject arrangement and gives file codes. Titles (subject headings) of filing units were developed from a review of a selected number of office and records center files and forms, as well as from oper-

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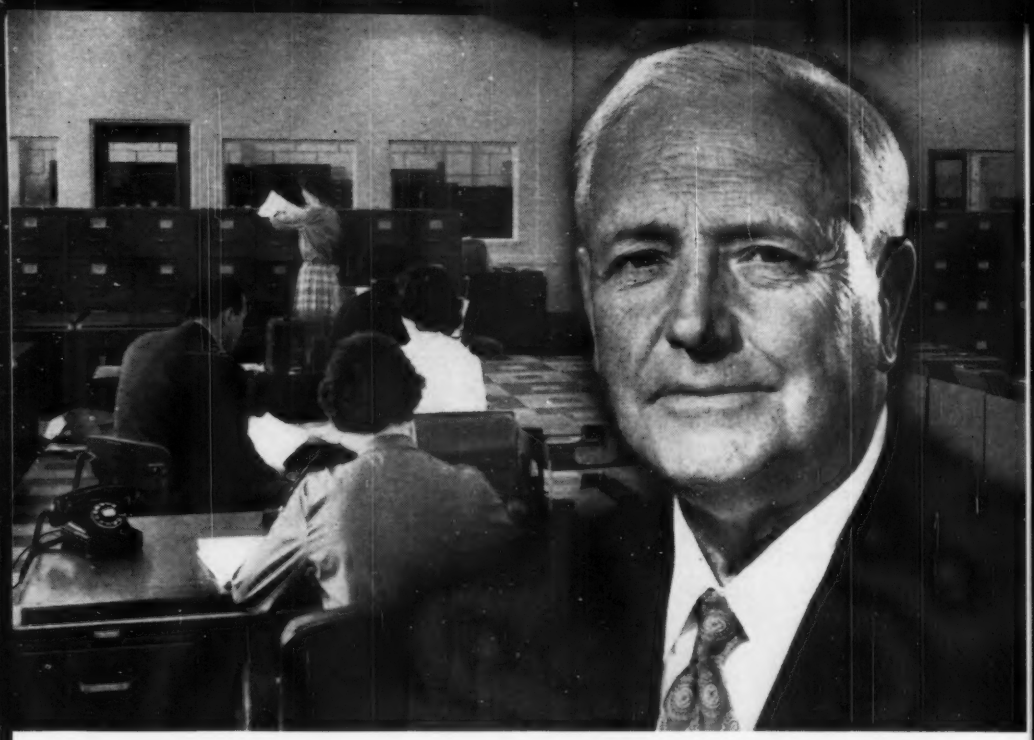

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ating and training manuals, and on the basis of standard operating procedures. The major subject categories in the manual and their code numbers are as follows:

Administration	01
Buildings, Grounds, Facilities	02
Cascade* and Utilities Operations	03
Elements, Compounds, Alloys	04
Equipment and Supplies	05
Finance	06
Health Physics, Safety, Fire Protection	07
Industrial Relations	08
Procurement, Receiving, Stores	09
Security, Plant Protection, Classification	10
Services	11
Systems	12
Uranium Control	13

*Our production operation.

The first issue of the filing manual covered the plant's interests and activities on a broad basis with references to some specific filing units. It was understood that the manual would eventually cover all specific filing units and all forms. Its expandable, loose-leaf format facilitated issuance of supplements as new information was collected. The manual includes data as to the record and non-record character of each filing unit (based on AEC definitions and practices), notations concerning the responsible department or primary location of each filing unit, retention periods in offices and records centers, and schedules for disposal or transfer of files to records centers.

We next adopted a working program containing these features:

1. Procedures for the location and identification of records or filing units.

2. Methods to determine the purpose, use, and need for each filing unit.

3. Policies to determine and designate departments and groups responsible for maintenance of specific filing units.

Our plan of operation is not uncommon, the only significant difference be-

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For More Information Circle No. 341

Every mailing meant a mob scene!

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"Then we got smart and brought in the little Pitney-Bowes folder and inserter. Now one girl handles all six mailings. Peace, it's wonderful!"

Pitney-Bowes
Folders & Inserters

Made by the originator of the postage meter . . . 139 offices in the U. S. and Canada, with nationwide service coast to coast.

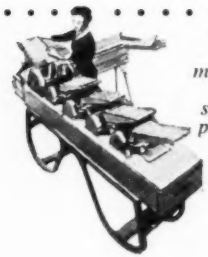
For More Information Circle No. 333

The Model 3300-FH is a small combined folding-inserting machine —that folds and stuffs into envelopes 500 single sheet enclosures within eight minutes.

The 3300-FH handles cards, price lists, invoices, booklets, bulletins, even stapled sheets. It is easy to set and operate, adds greater work capacity; helps avoid interruptions, the diversion of office girls from their regular jobs, overtime, and hiring temporary workers. The inserter unit can be used separately with any PB folding machine.

Ask any Pitney-Bowes office for details, or send for free illustrated booklet and case histories.

FREE: *Handy desk or wall chart of postal rates, including recently increased parcel post rates.*



The 3100 Inserter is a larger, high capacity model, that will stuff up to six enclosures, at speeds as high as 6,000 per hour. It can also be attached to a Pitney-Bowes postage meter mailing machine that meter stamps and seals envelopes after stuffing.

PITNEY-BOWES, INC.
3468 Crosby St., Stamford, Conn.

Send free ☐ illustrated booklet and "case studies" on PB Folding and Inserting Machines; ☐ Postal Rate Chart.

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For More Information Circle No. 333

ing the lack of committees and line group consultants. We have no appointed records management liaison personnel in line groups. Decisions are made by the records management department with the help of the department or group whose files are under consideration. Usually we depend on the department supervisor. Approval of records schedules is the responsibility of the line supervisor and his supervision, the company's management, and the records management department. Our step-by-step procedure of scheduling records follows:

1. Conferences are held with supervision in a single division to discuss the objective and goals of the records program, supervisors' position in the program, and program's mechanics.

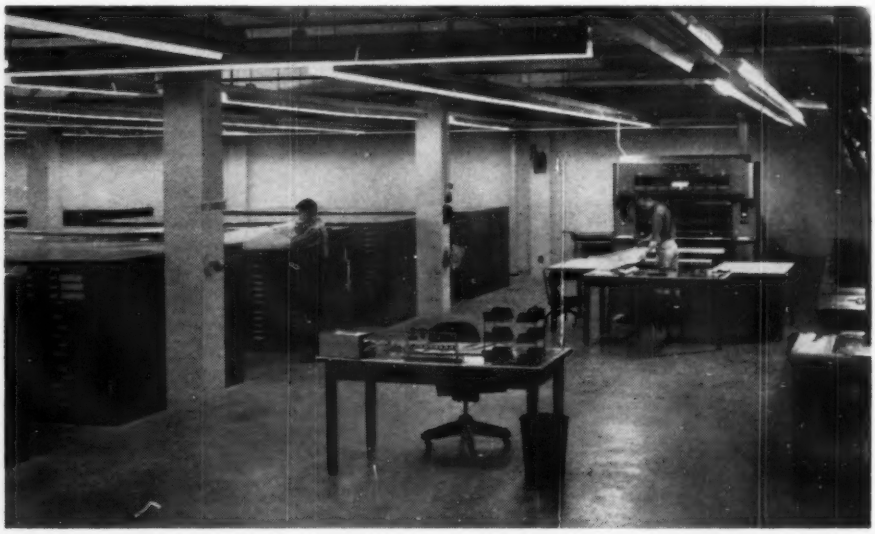
2. A folder-by-folder inventory is made of each department's files. The title, file codes used, contents and physical characteristics are recorded.

3. Preliminary analyses of each file are made by records management department personnel as to record character, purpose, department responsible for the file (location), and length of retention anticipated. Analyses and determinations are based primarily on operational value, then on AEC recommended schedules and legal requirements.

4. Definite schedules are established in conference with line supervision after review of the above preliminary determinations.

5. File codes used are reviewed and, if necessary, revised to conform with format prescribed in the filing manual.

6. A records inventory summary is prepared and submitted to the supervisor for approval. This indicates the



The engineering records section contains complete drawings of the plant and its equipment. An Ozalid machine (at rear) allows rapid reproduction of drawings.

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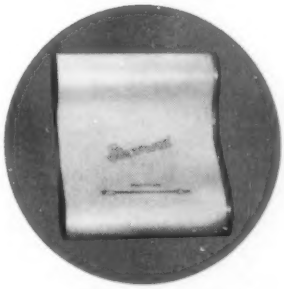

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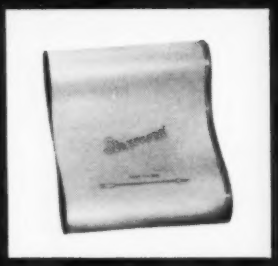

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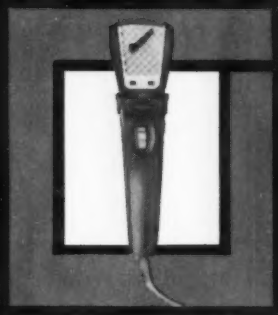

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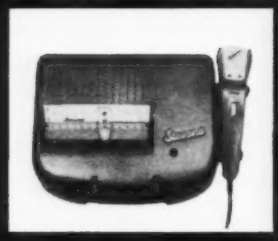

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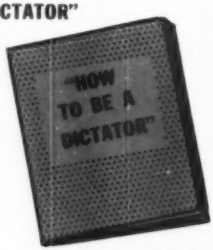


Illustrated handbook of helpful ideas to save you time and make your job easier.

exact arrangement of the office files, file title and content when appropriate, and period covered by the file. It states the record or non-record character of each filing unit, the office responsible for the file (location), retention periods in offices and record centers, and disposal action.

7. Internally approved records schedules are submitted through the general manager's office to AEC for approval.

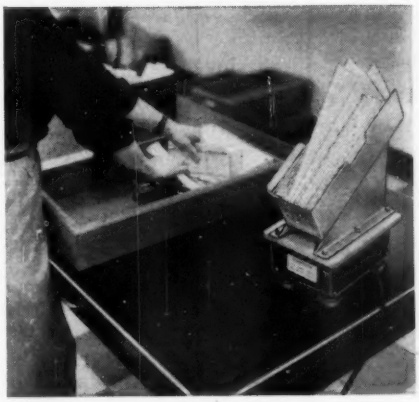
8. Schedules are also submitted to the company's contract administrator, a member of the legal group of the parent company (Goodyear Tire & Rubber Co.). His approval is tacit. He may veto specific schedules, but there is no pocket veto.

9. Approved record inventory summaries, incorporating any changes made by AEC, are returned to line supervision for implementation.

10. Pages of the filing manual affected by newly approved inventory summaries are revised and distributed to all holders of the manual.

11. Copies of approved summaries are transmitted to record centers where personnel assist line supervision to put the schedules into effect and arrange the latter's files upon request.

After schedules are in effect and office files are properly arranged, the manual replaces the records inventory summaries as the records management tool. Any subsequent decisions of the records management department which are to have plant-wide effect are entered in the manual. These decisions apply even to departments not yet inventoried and scheduled. For example, after procurement files were scheduled, the filing manual instructed all departments ex-



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cept the purchasing department, designated as "record holder," to dispose of their records relating to procurement. The effect was early disposal of a multitude of unnecessary files.

Files throughout the company are integrated, figuratively speaking. Regardless of location, in offices or record centers, files are uniformly identified by subject and contents. Only records maintained more than two years or accumulating in large volumes within short periods are transferred to records centers. They are transferred without change of character and with little or no analysis. In the records centers, files lose all departmental classification and are identified only by subject or file code.

Our records program, with the positive accent and efficient service as its primary objectives, is paying dividends. Information in office files and records centers can be retrieved quickly with a minimum of clerical effort. Last year's increase in paper holdings was only 3% of the previous year's holdings. In a plant operating four years, representing a capital investment of about a billion dollars and employing more than 2000 people, this increase seems justified. Since only one-third of the scheduling program has been completed, and few corporate records have reached maturity, we look for even greater control over paper increases. We constantly seek ways to simplify our procedures, supply information and data more quickly, weed out unnecessary duplication, and use the information and data we have assembled more effectively.

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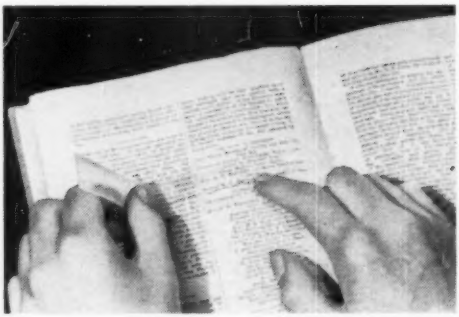

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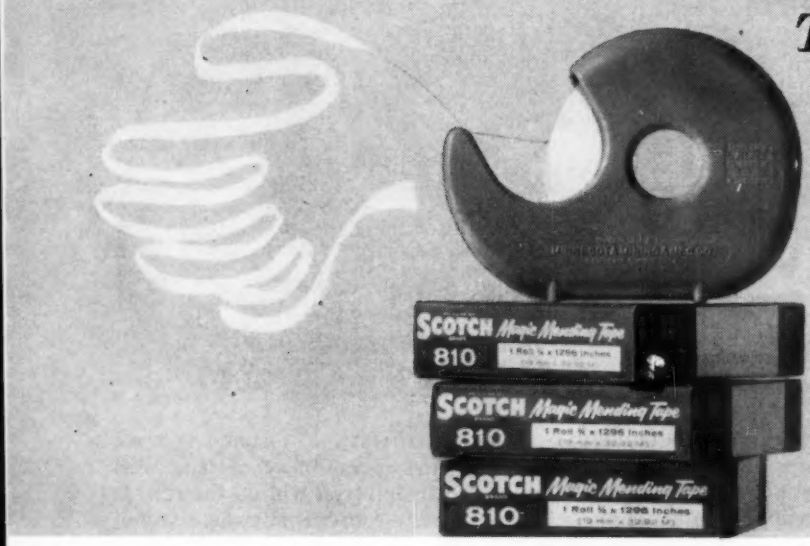

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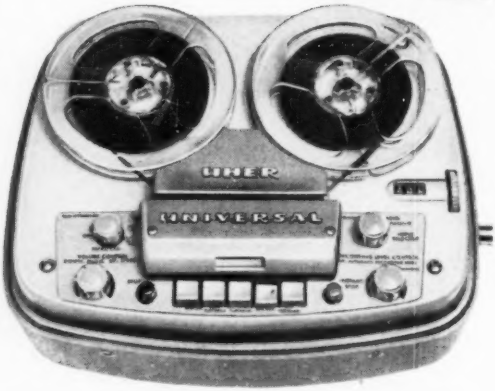

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White-Collar Workers Set Pace in Income And Employment

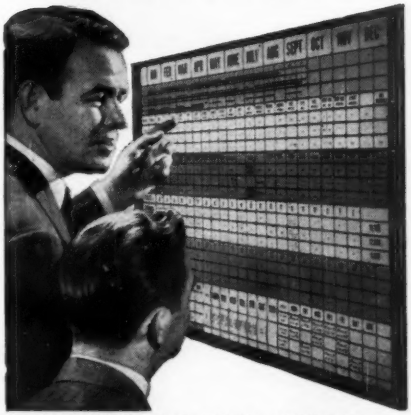
THE INCOME of all white-collar occupations grew by more than 60% during the last decade and now makes up more than half the entire income received by all employed civilians in the U. S., according to data compiled by the Bureau of the Census and released by the Institute of Life Insurance.

The following table shows the aggregate income changes (in billions of dollars) of the principal groups of employed between 1951 and 1958:

OCCUPATIONAL GROUP	1951	1958	% GAIN
White-Collar	$82.7	$134.9	63
Professional	21.1	43.0	104
Managers & Props.	31.3	46.2	48
Clerical	19.7	30.0	52
Sales	10.6	15.7	48
Blue-Collar	72.1	92.8	29
Craftsmen	32.3	42.8	33
Operatives	32.0	40.1	25
Laborers	7.8	9.9	27
Service	9.6	15.5	61
Farm	11.8	9.4	—20
Total	$176.2	$252.6	43

The Bureau of Census figures show that white-collar occupations as a whole had an employment gain of 4½ million in the 1951-58 period, or 21%. In the blue-collar group, combined employment was down some 800,000, or 3½%, with recessionary influences in 1958 a factor. Professional occupations led all other classifications with a rise of 39% in employment and a jump of 104% in aggregate income.

How To Get Things Done Better and Faster



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- Exclusive push button programmer permits different collating jobs to be run at the same time
- Occupies only 17½ square feet of floor space
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- Handles sheet sizes from 7" x 8" to 11" x 14" in almost every weight and finish
- Foolproof miss and double detector stops machine instantly, preventing errors in finished sets

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- All 12 stations can be loaded in a minute. No adjustments necessary for weight or finish of stock
- Each station will handle approximately ½ ream of 3″ x 5″ to 11″ x 14″ stock in most weights and finishes
- Any station can be eliminated simply, easily... at the flick of a lever
- Automatic miss and double detectors stop machine instantly... provide positive accuracy
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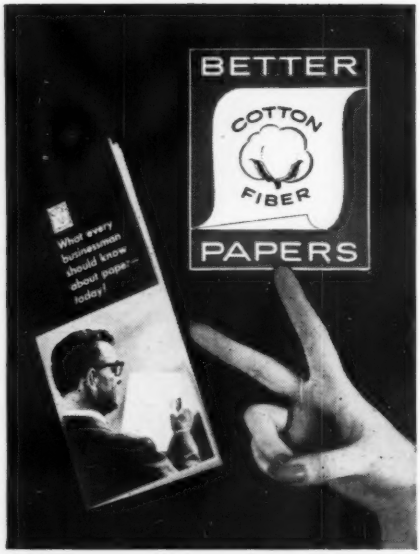

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NEW Books

COMPARATIVE JOB PERFORMANCE BY AGE — OFFICE WORKERS. Bureau of Labor Statistics Bulletin 1273, Government Printing Office, Washington 25, D. C., 30 cents.

This was previewed in last month's issue of THE OFFICE. It shows that the difference in output per manhour of office workers among age groups are for the most part insignficant. There is considerable variation among workers in the same age group and sizable proportions of older workers exceed the average performance of younger groups. Older workers had a steadier output rate. The findings substantiate the need for individual evaluation of workers.

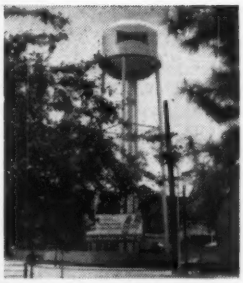
INTRODUCTION TO LINEAR PROGRAMING by R. Stansbury Stockton. Allyn & Bacon, Inc., 150 Tremont St., Boston 11, 104 pp., $2.25.

Introduces business administration students to linear programing. Aids them to develop an appreciation of the nature, role, strengths and weaknesses of explicit, quantitive methods in the analysis of production programs. Methods described require only a knowledge of linear equations and a few basic concepts of high school algebra.

AUTOMATION: ITS IMPACT ON BUSINESS AND LABOR by John Diebold. National Planning Assn., 1606 New Hampshire Ave., N. W. Washington 9, D. C., 64 pp., $1.

In this NPA Planning Pamphlet No. 106 the author proposes a concrete outline for exploring the social and economic consequences of automation. He points out that it is in the office, rather than in the factory, that automation will have its biggest and most immediate impact. He sees automation as the key to the survival of our way of life, and discusses its prob-

JOSEPH J. GREIPP, TREASURER of Fels & Company.



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able effects with suggestions as to how business and labor can adjust with maximum benefit and minimum employee displacement.

PRODUCTION CONTROL by Nyles V. Reinfeld. Prentice-Hall, Inc., Englewood Cliffs, N. J., 339 pp., $8.

Results of seminars with over 500 U.S. and Canadian firms together with the questions and answers from discussions with some 1500 production control men are presented in this book. Contains data on forecasting, as well as practical information on scheduling, planning, managing and controlling inventories, principles and details of making and using reports and followups. Includes over 100 illustrations and an appendix containing pertinent problems.

RLM SPECIFICATIONS BOOK. RLM Standards Institute, 326 Madison St., Chicago 6, 52 pp., Free.

The 1960 edition for industrial lighting units includes three new specifications for 1500ma units: D-4 fluorescent semidirect medium high mounting, SD-3AL semidirect aluminum and SD-3PE semidirect porcelain enamel units. Available to architects, engineers, contractors, distributors, buyers, etc.

OVERTIME COMPENSATION FOR EXEMPT EMPLOYEES by E. M. Gottlieb. American Management Assn., 1515 Broadway, New York 36, 39 pp., $2.25.

Research study based on an AMA survey to determine in what circumstances, and to what extent, management voluntarily grants overtime compensation to exempt personnel (those not covered by any provision of state or federal law).

WRITTEN REPORTS. Industrial Writing Institute, Box 4658, Cleveland 24, Free.

This booklet shows how U.S. industry executives waste billions annually because they can't express themselves well in writing, tells how to train employees to write accurately, clearly and fast.

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For More Information Circle No. 348

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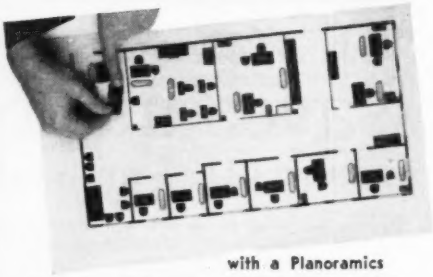

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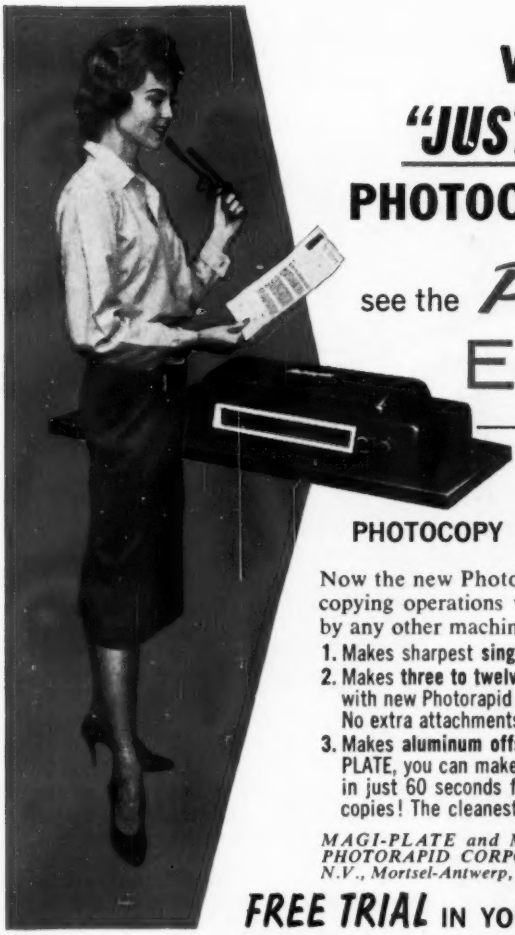

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For More Information Circle No. 321

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. . . THE RIBBON THAT DOES EVERYTHING! *

* Everything you could reasonably expect a business machine ribbon to do . . . from general typing to data processing! Whether used for manual or electric typewriters, billing machines, tabulators, wire printers or any of the newest high speed data processing machines, Columbia Silk Gauze ribbons deliver the results you want.

Silk Gauze ribbons have proved themselves through years of superior performance. They are made of the finest, lint-free silk obtainable, inked by an exclusive Columbia process. You get the sharpest, most uniform write you've ever seen. Super-strong, extra-length Silk Gauze ribbons are still on the job long after ordinary ribbons have called it a day.

For a demonstration of Silk Gauze ribbons that meet your particular requirements, call your Columbia supplier or consult the Yellow Pages.

SILK GAUZE RIBBONS

by Columbia®

Columbia Ribbon & Carbon Mfg. Co., Inc., Glen Cove, New York
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For More Information Circle No. 205

"Here's how I cut costs and saved hours in wiring CONTROL PANELS"

1. Wiring control panels for data processing machines used to be a headache — as was changing or checking tangled wires. Then I read about the new work-saving GC panelLOGIC Kit and I ordered one.

2. My panelLOGIC Kit arrived with cutting and stripping pliers, two simple tools for wrapping and unwrapping, a supply of terminals and wire. Step-by-step photos helped me make neat, compact, tight panels.

3. Complete color-coding by major card field and machine function is simple with panelLOGIC's ten wire colors. Wiring is easy to check and to change. And finished control panels can be stored more compactly.

4. The beauty of panelLOGIC lies in its simplicity. Why didn't someone think of this before! Why don't you write and get the full story?

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Manufactured by:
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Distributed in Canada through Clarkson Press (Canada) Ltd., Herbert St., Gananoque, Ontario

For More Information Circle No. 234

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DUPLICATING PRODUCTS

SURE! I'd like to know more about the new Table-Top offset duplicator. Send me your free kit.

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A. B. Dick Co., 5700 West Touhy Ave., Chicago 48, Ill.
For More Information Circle No. 453

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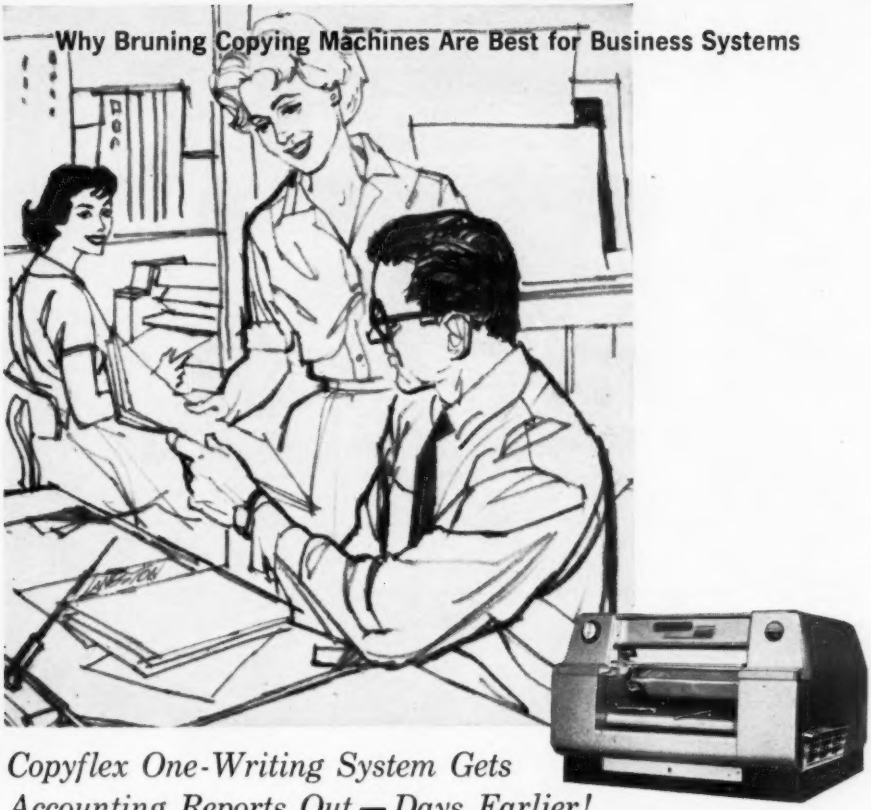
Get the important benefits of machine bookkeeping at low cost! The Royal McBee General Records Poster handles your payroll, accounts payable, accounts receivable, general ledger, inventory—without the need for skilled operators. Anyone can use it! You post all associated records simultaneously with one entry. You get accurate register of all postings to all records; elimination of transcription errors; instant flexibility to changing office routines; complete adaptability to centralized or decentralized operations. And all at a remarkably modest investment. Your nearby Royal McBee Data Processing Representative will be happy to demonstrate. Call him, or write Royal McBee Corporation, Data Processing Division, Post Chester, New York for brochure S-533.

ROYAL McBEE · *data processing division*

NEW CONCEPTS IN PRACTICAL OFFICE AUTOMATION

For More Information Circle No. 311



Copyflex One-Writing System Gets Accounting Reports Out—Days Earlier!

Bruning Copyflex copying machines do more to speed and simplify accounting paperwork than any other paperwork machine on the market.

Copyflex flexibility lets you reproduce, from one worksheet or form, any series of comparative, cumulative, or consolidated reports and schedules. You write or type information once on the original form, add or change information whenever desired, make up-to-date Copyflex copies at any point for distribution. No clerical retyping or rewriting of repetitive data. No proof-reading. No copying errors.

Copyflex will fit in with any forms or electronic data processing equipment you are now using. Whether it's a multiple-part continuous form or a snap-out set you simply include a translucent part which can be used by Copyflex to reproduce additional copies.

Copyflex gives you sharp, black-on-white copies (color-coded if desired) for as little as a penny each for materials for letter-size. A small Copyflex machine costs no more than a standard typewriter. You have everything to gain by mailing the coupon.

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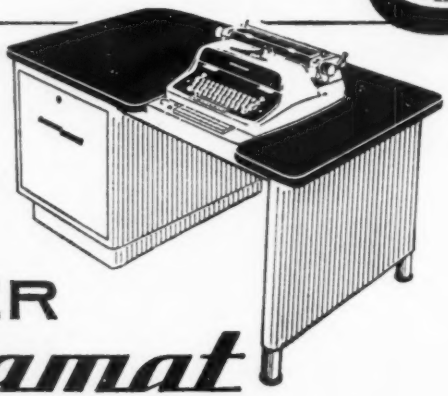

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AUTOMATIC INVOICING MACHINE

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For More Information Circle No. 289

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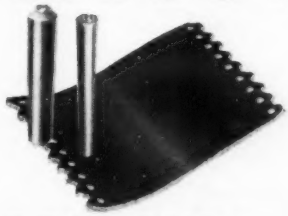
MERCURY-LITH ROLLERS AND BLANKETS
for Multilith printing machines

MERCURY-GRAPH ROLLERS
for Multigraph duplicating machines



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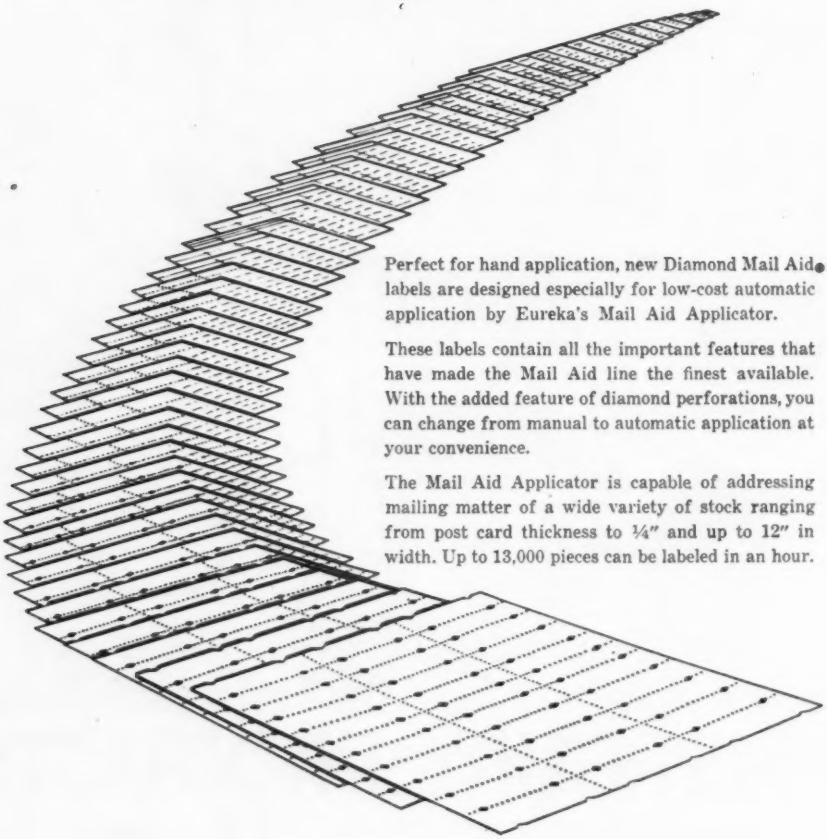
EASTERN SALES OFFICE AND WAREHOUSE: 218-224 ELIZABETH AVENUE • NEWARK 8, N. J.

For More Information Circle No. 204

LOOK FOR THE DIAMONDS



Perfect for hand application, new Diamond Mail Aid® labels are designed especially for low-cost automatic application by Eureka's Mail Aid Applicator.

These labels contain all the important features that have made the Mail Aid line the finest available. With the added feature of diamond perforations, you can change from manual to automatic application at your convenience.

The Mail Aid Applicator is capable of addressing mailing matter of a wide variety of stock ranging from post card thickness to ¼" and up to 12" in width. Up to 13,000 pieces can be labeled in an hour.

Your stationer soon will have regular numbers of Dupli-Stickers®, Dupli-Snap®, and Dupli-Quik® labels with diamond perforations. Remember — even if you plan to continue manual application — Diamond Mail Aid labels are your best buy.

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DUPLI-STICKERS, DUPLI-QUIK, DUPLI-SNAP ARE REGISTERED TRADEMARKS IN U. S. PAT. OFF. AND IN CANADA.

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For More Information Circle No. 256

Trade **Rovico** Mark

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PHOTOCOPIERS NOW 5 MODELS!

A SPECIFIC SIZE
FOR EVERY
REQUIREMENT

WORLD'S LARGEST PHOTOCOPIER
COPIES FULL
27½"
WIDTH
BY ANY LENGTH

"PRESIDENT"
COMPLETE UNIT
$650.00

ONLY
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The ROVICO FOTOMATE copies anything typed, written, printed, drawn or photographed. It copies any ink, crayon, carbon or non-carbon based material in any color from any paper. It copies both one-sided and two-sided originals and can make multiple copies of both. Rovico FOTOMATES and paper make it possible to obtain razor sharp, crystal clear photo copies that range from the deepest blacks to the lightest halftones.

ROVICO'S 27½" PRESIDENT breaks the blueprint bottleneck! Makes clear, black-on-white copies of blueprints, without an intermediate. Processes projection prints made on Rovicopy paper from microfilm. Makes regular photocopy prints with Rovico UV negative. Makes hundreds of copies from ONE negative!

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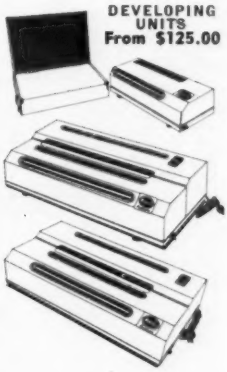

Rovico Incorporated

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For More Information Circle No. 473

At last - a ballpoint especially designed for office use!

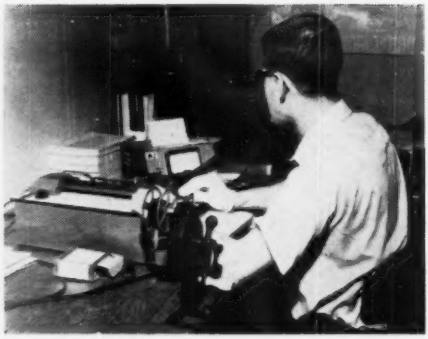
For More Information Circle No. 268

Camera!

Walter W. Finke (right), president of Datamatic Div. of Minneapolis-Honeywell, and David H. Locke, Wellesley (Mass.) selectman, break through barrier of office forms in ceremony dedicating Datamatic's new marketing and training center at Wellesley. Order backlog for the Honeywell 800 electronic data processing system is in excess of $35 million.

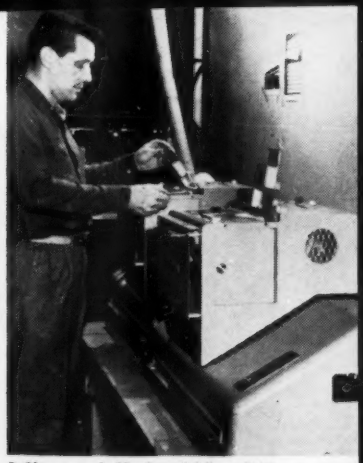
Ruoth Holt Direct Mail, a new firm in Tulsa, Okla., recently installed Pitney-Bowes inserting, mailing and folding machines, mail scales, tables and mailbag racks.

How Signal Corps Saves With Microfilm

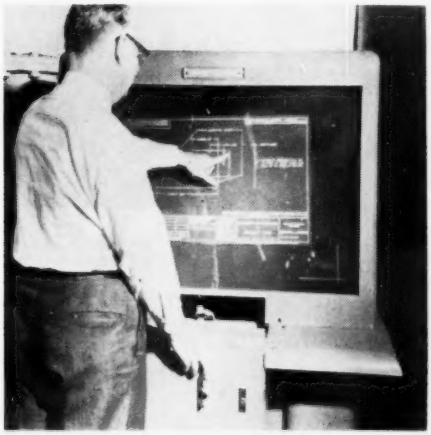


Upon arrival at Fort Monmouth, N. J., all engineering drawings are microfilmed by a Recordak camera (at left) and the completed roll of film is tested by a densitometer for quality of reproduction (above). The Army Signal Equipment Support Agency transformed its 220,000 drawings into 18 sets of aperture cards; and some 400,000 manufacturers' drawings into 16 sets of cards. This totaled 10.4 million aperture cards. Updating requires a million cards a year. The microfilmed card files occupy 1/30 the space required to file the drawings.

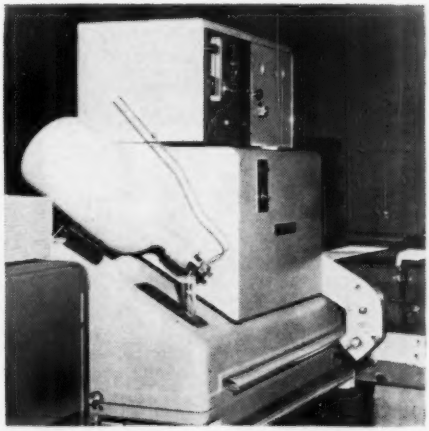
Individual microfilm frames are mounted into Filmsort aperture tabulating cards that have been keypunched with data pertaining to each drawing. (See opposite page.)



It used to take as long as three days to locate, reproduce and deliver a full size 22″ x 34″ drawing. With the aperture cards in Simplafind files (at left) a reproduction can be delivered over the counter in 90 seconds; or an engineer can have a duplicate printed card made in a matter of seconds (at right).



Signal Corps engineer examining a drawing in one of the many Filmsort Surveyor viewers strategically located throughout the office.



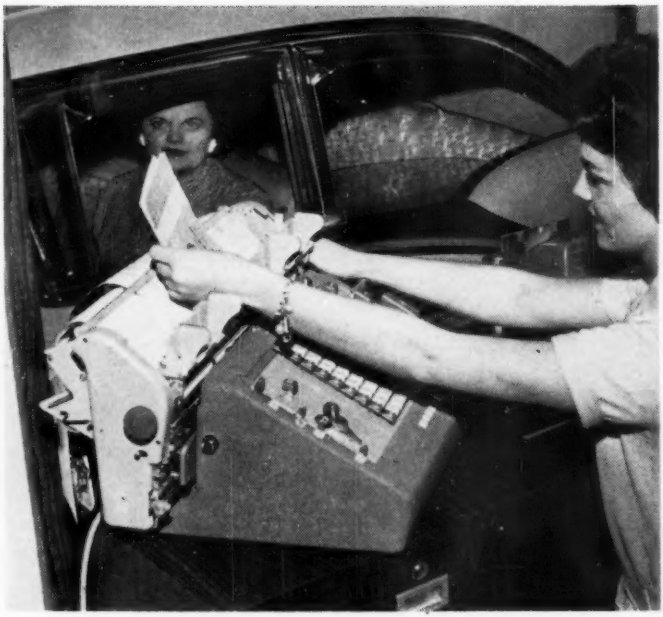
Technifax machine makes diazo film duplicates of images in aperture cards to put single sets of plans in roll form.

The Signal Corps saved 404.4 tons in shipping weight (the 620,000 drawings weighed 414.4 tons) or 80 lbs. per 1000 cards. Francis R. Borden (left), microfilm project engineer, and William E. Spicer spot check cards prior to worldwide distribution.

Jim Shea, printing supervisor; Sherman Elrod, head of office services; and Irma Scull, a secretary, at Los Angeles Firestone Tire & Rubber Co. which uses Photorapid's aluminum Magi-Plate made by Gevaert.

A set for the movie "Pillow Talk" was decorated with walnut office furniture made by Myrtle Desk Co.

Natural cut stone wall dominates the new reception lobby of Griswold-Eshleman Co., Cleveland advertising agency.

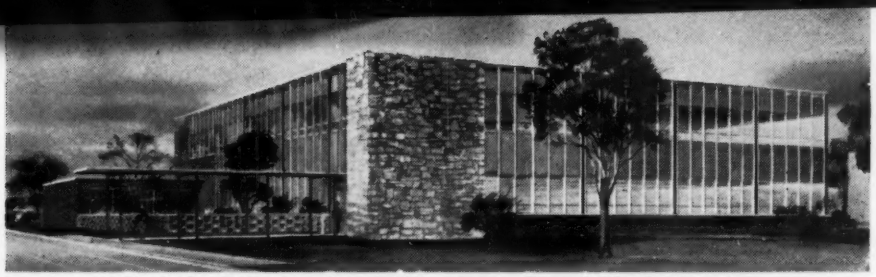


Virginia Gillenwater servicing a customer at the new drive-in facility of the Central National Bank of Jacksonville, Fla. Savings deposits and withdrawals, commercial account deposits, check cashing, Christmas Club accounts and other banking operations are processed on a President machine made by Monroe Calculating Machine Co.

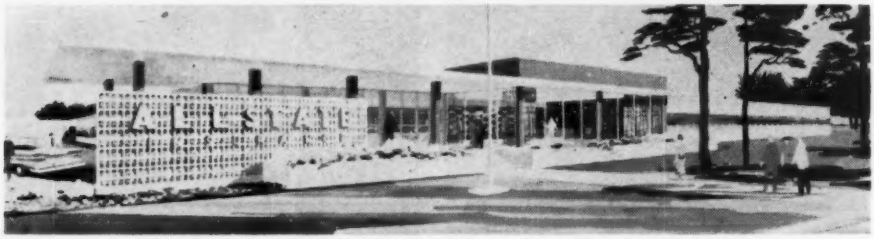
Office Center Grows in Southwest

Empire Central is a 90-acre site development for office buildings. The concept of Windsor Properties, Inc., Dallas, it is located four miles outside the city — convenient for executives and employees in the surrounding metropolitan area. Site is designed to meet the problems of high population density in our urban centers.

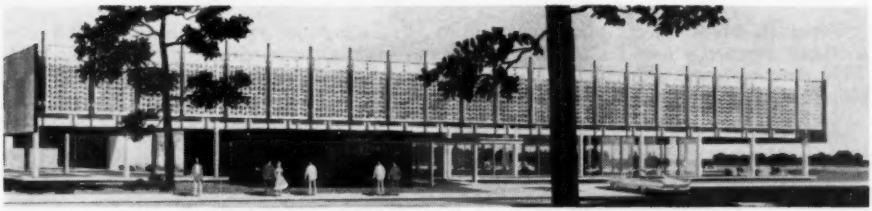
The Empire Club, occupying 10% of the site, was created for use by employees of firms in the development as a break to high personnel turnover. Above, the club's dining area; at left, its garden. (See opposite page.)



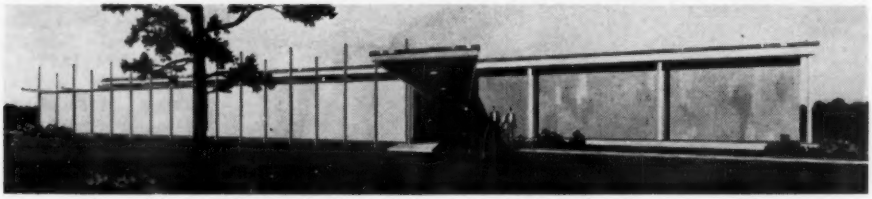
Typical offices are those of Insurance Co. of North America.



Allstate Insurance Co. has 61,000 sq. ft. in Empire Central.

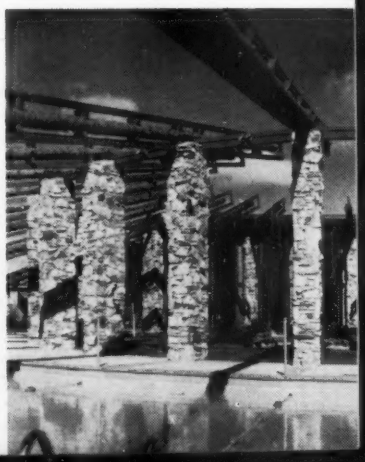


Home offices of Core Laboratories, Inc., will be located here.

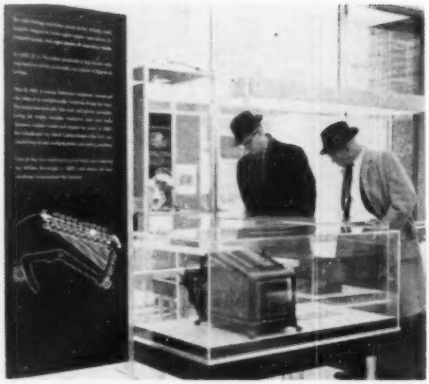


Consulting engineers A. Earl Cullum Jr. & Associates' modern offices.

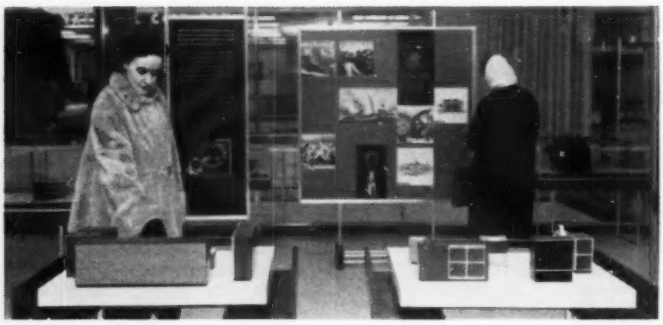
Shrubs and plants (left) form exotic backdrop in Empire Club's restroom area. Swimming pool (right) is just one of the recreational facilities offered by the club.



Bank Exhibits Calculating Devices

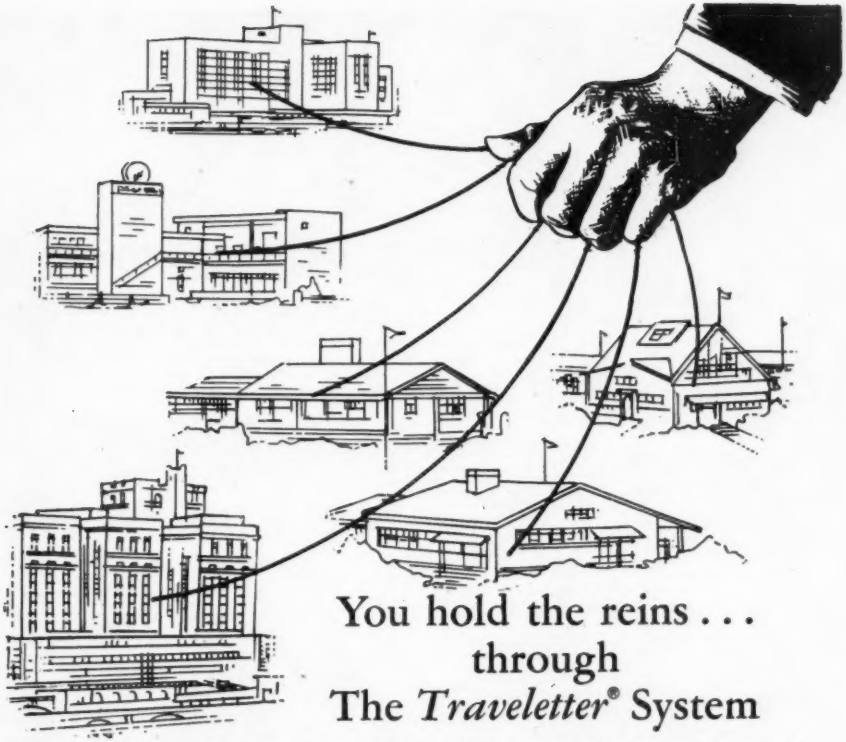


William H. Moore (left), chairman, and W. P. Livingston, vice president in charge of methods research, Bankers Trust Co., compare an abacus with a model of an IBM 7070 data system at an exhibit of calculating devices in one of the bank's New York offices. At right, visitors inspect an early Burroughs adding machine.



The exhibit also included Napier's "bones" (1617), a multiplier with a series of rods; and Pascal's arithmetic machine (1653), first mechanical calculator.

Other calculators shown were early models by W. T. Odhner, Rodney and Alfred Marchant, Dorr E. Felt and W. B. Burroughs. An early direct multiplying machine, Otto Steiger's Millionaire (1893), was included.



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The key to the ***Traveletter*** System for handling the reimbursement of travel expenses for your representatives is ***Traveletter's*** network of over 5,000 hotels and motels across North America.

Immediate acceptance of The ***Traveletter*** credential by these affiliated hotels and motels means that your representatives are always secure in the knowledge that they can easily obtain monies for continuous travel.

But, what does this network mean to you, Mr. Employer?

It means that, should termination of a credential be necessary, a phone call to ***Traveletter's*** Communications Department will start the machinery that will relay this information, via bulletin, to all our correspondents in North America and overseas. This means that you are fully protected against loss or possible unwarranted withdrawal of company funds. It further means the tightest possible control for reimbursement of travel expenses yet devised.

If your present system, or any other system under consideration does not give you this protection and control, you should investigate The *Traveletter* System immediately.

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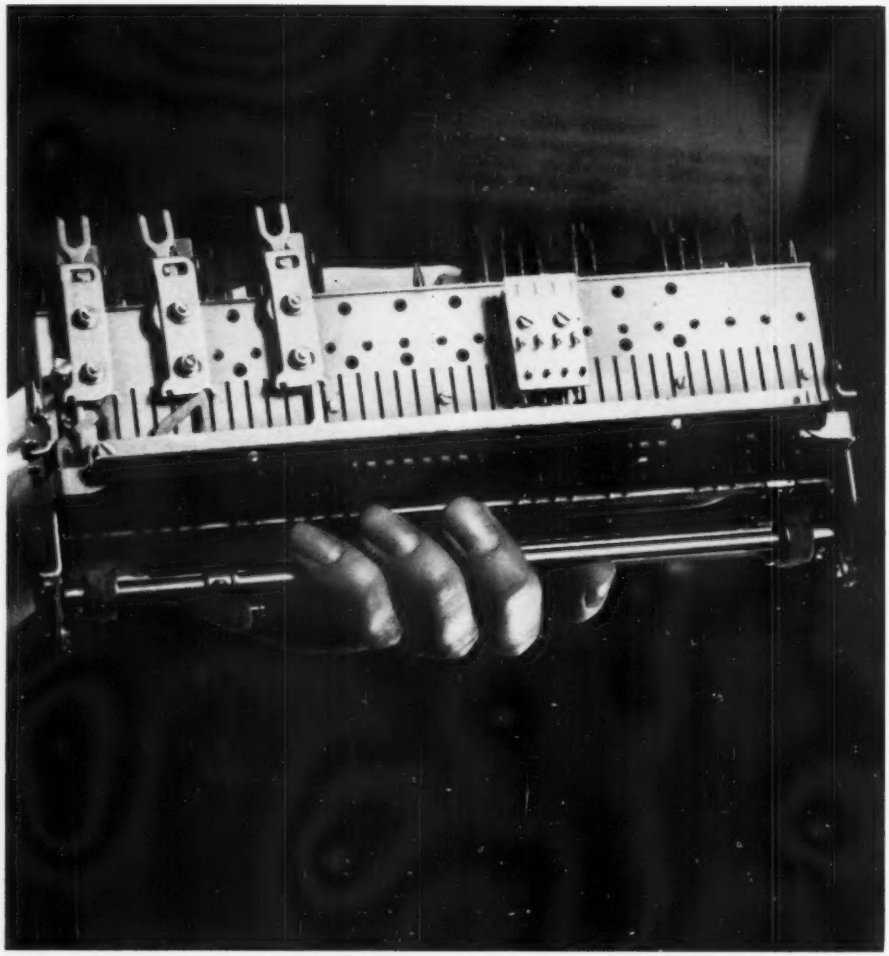
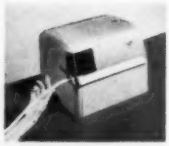
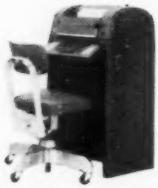




Typing Tape Punch

Tape Reader



Send-Receive Page Printer

Automatic Send-Receive Set

For More Information Circle No. 336

Stunt Box— your Big Plus with Teletype printers

Built into Teletype Model 28 page printers is a control device called the Stunt Box. The function of this unique component is to provide extra control facilities for both local and remote operations. Thus—in addition to transmitting, receiving and recording messages and data—the page printer can be used for a variety of switching, remote control and selective calling tasks.

The Stunt Box reduces costs by simplifying equipment needs and systems arrangements. It is the Big Plus—the extra value in Teletype Model 28 page printers and automatic send-receive sets.

Teletype Corporation manufactures this equipment for the Bell System and others who require the finest in data communications equipment.

Write for free 20-page brochure, "The Teletype 28 Stunt Box," to Teletype Corporation, Dept. 34E, 4100 Fullerton Avenue, Chicago 39, Ill.

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"... unmeasured service to a distinguished list of customers."

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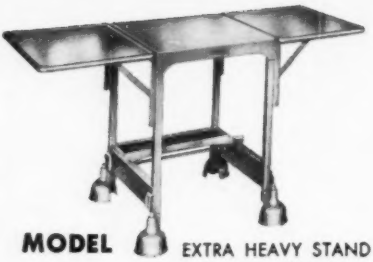
GREATEST ALL PURPOSE, completely safe, Stand for costly office machines. Adjustable open top . . . noise-escape hatch. Castings cover retractable casters; anchor firmly on floor.



MODEL 8802

EXTRA HEAVY STAND for many types heavier, electrically operated, office machines. Square, tubular legs. Solid steel top, undercoated for sound-vibration abatement.

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VIBRATION-FREE RIGIDITY. Square, tubular legs. Adjustable, one piece, open top . . . noise-escape hatch.

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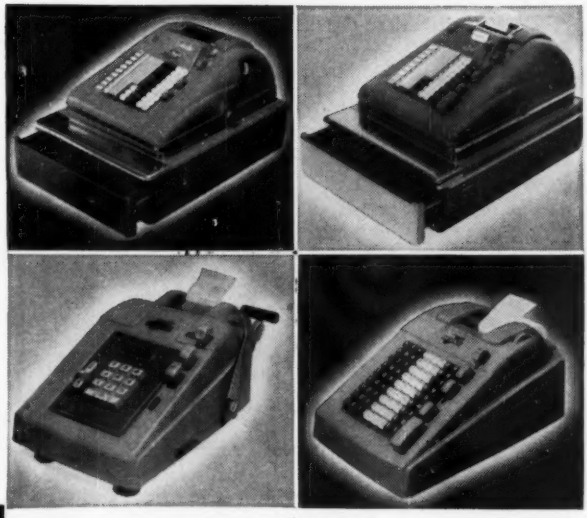

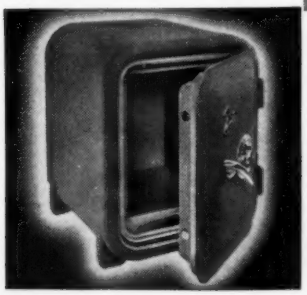

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Rapid Printer
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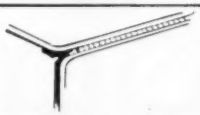

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Top-value machine for everybody who figures. Operates electrically at lightning speed. Adds 7 columns, totals 7 (1¢ less than $100,000.00). Multiplies with just 1 entry. Prints total, subtotal on tape.

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For More Information Circle No. 218

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Adds 9 columns, totals 9 (1¢ less than $10,000,000.00). Handles heavy workloads quickly, economically, outperforming machines selling for as much as twice the price. Good for years of accurate, dependable, uninterrupted service.

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For More Information Circle No. 216

How Microwave Radio Provides Economical Communications

GEORGE A. HINCKLEY and RICHARD N. ZAMEN
Communications & Data Processing Operations,
Raytheon Co., Waltham, Mass.

AS ONE OF THE WORLD'S largest manufacturers devoted exclusively to electronics and a firm which went from a few departments little more than two decades ago to its sprawling 13-division setup today, we have been faced with communications problems. Only recently, however, did we realize that a solution to this trouble lies in one of our own products, multichannel microwave equipment.

Under a recent FCC Limited Privacy User ruling, new wavebands have been opened for this purpose. Raytheon makes microwave equipment to accommodate 240 voice channels. Some of these channels can be connected to switchboards for private telephone use; others can be subdivided to accommodate up to 20 Teletype channels for an interplant network. By this technique, it will be possible to key individual Teletype machines or all machines may be activated for conference calls, thus cutting down materially on interdepartment mail. (Some 500,000 pieces of correspondence go through our central mail office—most of it internal—during peakdays.)

Using microwave transmission, it has been ascertained that of our company's locations that could be tied together for Teletype service, at least 12 could also readily handle special announcements, bulletins and even some personal messages. This Teletype-telephone system could economically provide managers and other key personnel with voice circuits for private and conference calls, and an integrated Teletype system.

This is helpful where companies spread over large areas find it necessary to get men together rather frequently, men whose on-the-job time is very valuable. When conferences *are* necessary, the men are not required to leave the plant. Company-owned and controlled microwave circuits take over to put them in touch with each other.

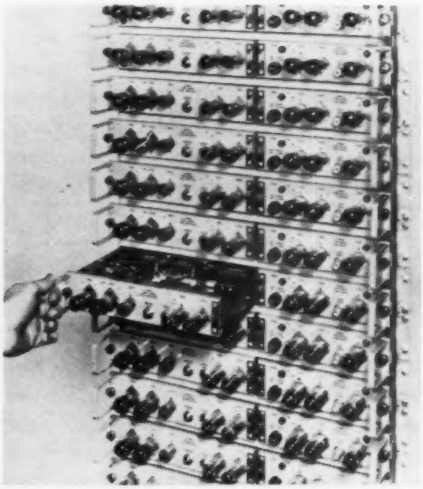
In relaying, it is not necessary to go to mountaintops for microwave hopping. Skyscrapers and other buildings are ideal, too. As a matter of fact, Raytheon recently sold some microwave equipment to the FBI for a hookup in the New York area. Similarly, any business firm desirous of overcoming its own communications traffic jam can plan its own alleviation.

What about cost? Approximately $3 per mile per month per circuit is the present estimate, with predictions that initial investment costs can be more than made up in a year's time. As you load up on a microwave system, the cost comes down. For example, consider a possible hookup between Raytheon, Waltham, Mass., and Lewiston, Me. (distance 145 miles). Microwave transmission between the two cities is

estimated at about $450 per month for one talking circuit. By using voice filters, up to five Teletype channels can be added to this standard voice channel. Each time another voice channel is added, the cost per channel cost decreases. The system is economical to begin with; becomes more so as workload is piled on.

From a practical standpoint, there is no problem (and in this the FCC concurs) as to the number of customers who can take advantage of the new ruling. As a matter of fact, at higher microwave frequencies, the transmitted microwave beam (from the bandwidth standpoint) becomes narrower, thus allowing more microwave systems in a geographic area. In taking advantage of its own facilities, Raytheon will be operating in the 12,200-12,700 megacycle band.

This means that a low-cost, privately-owned medium for communication is now available. It is ideal for branch banks, warehouses, branch stores and many other industrial and commercial facilities. For this reason, it might be interesting to look in on Raytheon and see how it would be done.



FM multiplex equipment designed for moderate cost microwave communication.

A study prepared by the company's communications and data processing operations department reveals that initial system requirements could result in providing one private line from the General Services Building (Brighton, Mass.) to each of the following locations in Waltham, Mass. (roughly a distance of six miles): (1) Gore Building; (2) Public Relations Office; (3) General Administration Building; (4) River Building; (5) Power Tube Building, plus a party line voice circuit and a party line Teletype loop connecting all stations.

To integrate the overall system, a location high on nearby Prospect Hill (Waltham) could be used. A 200 ft. tower would mount the reflecting elements of the antenna system. From this vantage point, it would be possible to extend the system to company plants in Lowell, Mass., Hookset, N. H., and Lewiston, Me., via. Mt. Washington to the north; to Wayland, Sudbury, Maynard and plants in Connecticut to the west; and to Quincy, Norwood, Walpole and North Dighton to the south. For full expansion, it is estimated that some 12 microwave frequencies would be needed to get in and out of the Prospect Hill tower area. However, only six microwave frequencies would be required for the initial installation.

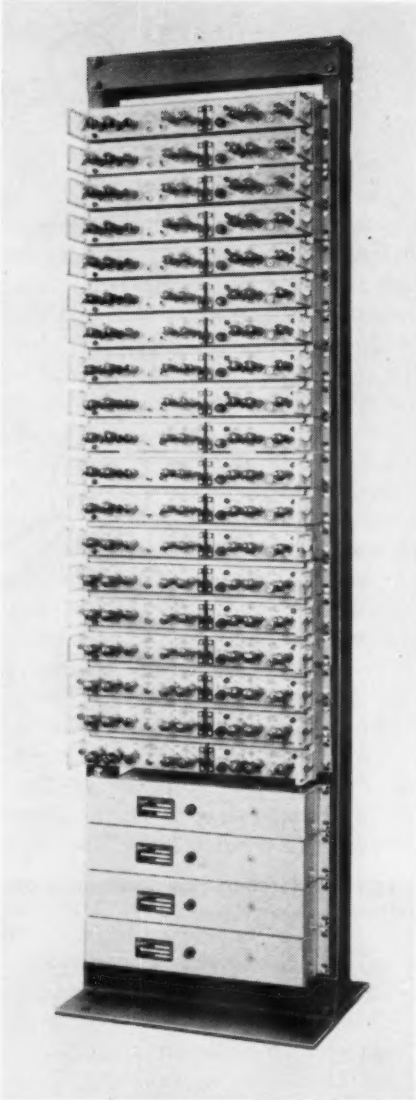
While the Waltham administrative and manufacturing area could be served by only one microwave terminal, it

would be necessary to interconnect the firm's Gore, River and Public Relations by leased wire from the telephone company. Beyond this, further expansion of the initial microwave system could be easily accomplished (see page 84).

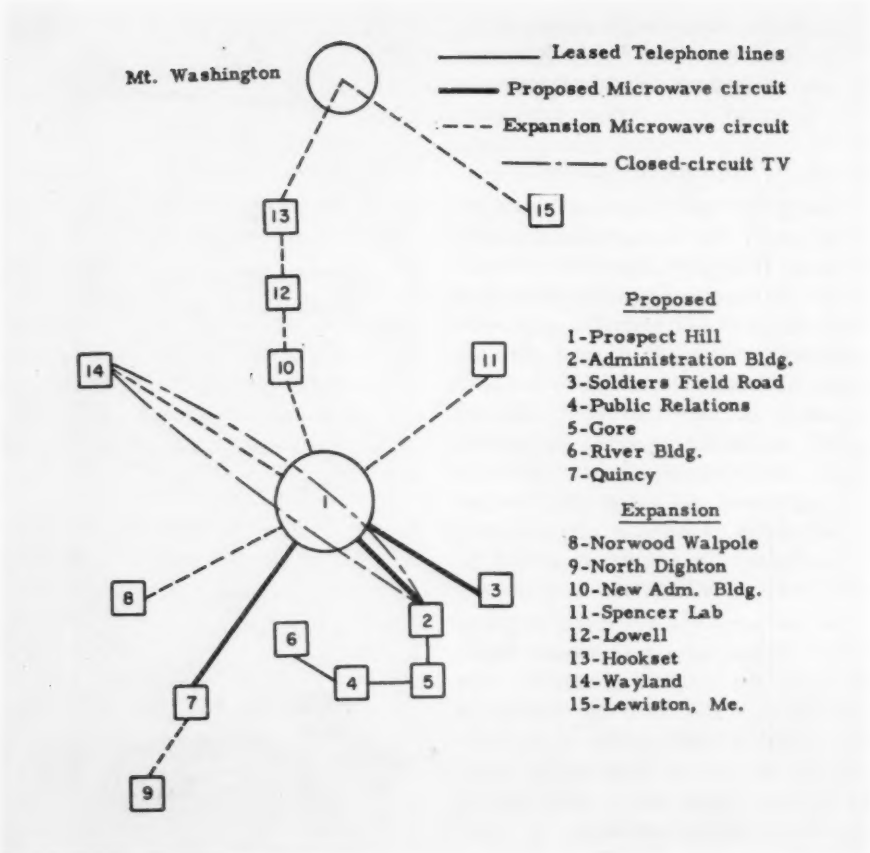
Among the advantages of a microwave system are its operational exclusiveness. Each individual link is completely interference free. The individual voice circuits used with the basic RF equipment afford the highest possible degree of privacy. Technically, to take advantage of the wide bandwidth of the RF equipment provided, equipment which subdivides the broad spectrum into numerous 3000 cps (cycles per second)-wide channels is used. Known as multiplex, this equipment would be used in the Raytheon installation.

For the party line voice and Teletype circuit, single sideband equipment which represents the simplest facility for this application is available. By employing filters, such a voice circuit permits the Teletype equipment to share the channel without interference, thus further minimizing equipment costs. In addition, the Teletype equipment involved could be furnished with selector boxes to permit selection of individual Teletype machines for receiving specific messages. Teletype machines would be located in the division manager's and in the division personnel offices at each location. Telephones could be placed in the above offices, too, and in any other locations desired.

When setting up this system, Raytheon could include a two-way television relay closed circuit system between its Waltham headquarters and its laboratory in Wayland, Mass. (approximately



This 24-channel, crystal controlled FM multiplex equipment operates in the 44 to 412 kc microwave band. Each channel includes voice and signalling, and may be subdivided into 18 telemetering, Teletype and control circuits.
(Also see photo on front cover.)



Geographic locations for Raytheon's proposed interplant microwave communications system.

30 miles distant). The basic equipment for this purpose is a six megacycle bandwidth (for transmission of the video) plus an audio program channel of 15 kilocycles bandwith (to permit two-way conversation between the sites). Thus, a two-way video and audio system featuring maximum flexibility could be provided at minimum cost. Such a television relay link could be added economically with the other equipment to be installed on the tower site. Estimated total cost to Raytheon for this venture into instantaneous private microwave communications from plant to plant would be approximately $65,000 (standard list price). If finalized, such a system could be a working model for other interested users. In this way, a first-hand visit would provide ideas as to how similar communications problems might be solved.

Office Procedures in the British Parliament

JOHN GRINDROD

MODERN SYSTEMS are conspicuous by their absence in the offices of the British Houses of Parliament at Westminster. Nonetheless, these offices are essential to the efficient functioning of both Houses.

The House of Commons was destroyed by enemy action in 1941. Covering eight acres, the present building alone contains some 1100 rooms. As can be imagined, administration of such a vast and complex organization can be difficult—especially as there are many offices housed in quite separate parts of the building, each with its own clerical and administrative staff.

Broadly speaking, Commons has three main departments. The Department of the Clerk of the House is subdivided with principal clerks to cover such sections as committees, public bills, journals, private bills and financial committees. There are also examiners of private bills and a tax officer. The Department of the Speaker incorporates sections covering secretarial and advisory duties in connection with the work of the Speaker, including the library, the fees office under an accountant and two assistant accountants, the office for the preparation of the Hansard Official Report, and the vote office. The Department of the Sergeant of Arms concerns itself chiefly with the maintenance of order, including the admission of the press and all visitors to the galleries, stationing police at strategic points and the general administration of the building and its facilities in conjunction with the Ministry of Works which provides a large maintenance staff.

All the offices come under the jurisdiction of the Commissioners of the House of Commons for matters of pay,

A former Lord Chancellor, the late Lord Jowitt, in his office with his secretary, in the House of Lords, London.

Much of a Member of Parliament's paperwork can be done in the House of Commons library.

etc., and do not form part of the Civil Service.

The catering department has its own office for routine day-to-day business and offices are maintained by the Inter-Parliamentary Union and by the Commonwealth Parliamentary Assn. Within the building, the General Post Office has a branch that is as large as those in many cities. As part of its work, this post office delivers mail to the various departments in both Houses. Many of the offices in the Commons are duplicated in the House of Lords.

Only ministers of the Crown and chairmen of important committees have offices of their own, some of these being on the ground floor under the Chamber of the House of Commons. On the lower ground floor there are secretarial, conference and interviewing rooms for use by members. Above the Chamber are other offices which house some of the staff of the Clerk of the House of Commons and some of the members' private secretaries.

Each member has a small locker in which to keep a few papers and there are offices where members can do their own typing. A secretarial agency also has space in the building.

There is office accommodation for the press. As many as 200 reporters may attend important debates. All daily papers have regular, full-time correspondents in the House.

Off of Westminster Hall, the oldest remaining part of the Houses of Parliament dating in its present form from 1394-99, is the fees office. Among the duties of this office are the payment of members' salaries and the receipt of various fees. As in other sections, it has not been found feasible to mechanize the system to any extent beyond the use of typewriters, addressing and copying machines and such. The specialized payment are considered too small in number and diverse in nature to warrant the use of accounting machines.

In the Middle Ages, members of Parliament were paid by their constituencies at the rate of four shillings a day for knights and two shillings a day for burgesses. This would correspond to £4 ($11.20) and £2 ($5.60) at present-day values. Now members receive a salary of £1000 ($2800) a year, plus an allowance of £750 ($2100). Out of this they must pay all their own secretarial expenses, but can claim tax relief for these and other expenses and are allowed free travel between their constituencies, homes and London on parliamentary duties. Members of the House of Lords are not paid but are

entitled to the cost of rail transportation to the House and other expenses incurred up to three guineas a day.

One of the functions of the fees office is to collect fees charged for private bills. Such bills are promoted, not by members, but by outside persons or bodies acting through a firm of parliamentary agents. Promotion, especially if opposed, can be very costly, counsels' fees ranging from £200 ($560) upwards. In addition, witnesses, agent's clerks, borough officials, etc., have to be paid. Although some bills cost less than £1000 ($2800) to promote, one bill in 1926 cost £17,000 ($47,600). This is small compared with expenses incurred in promoting railway bills during the boom of the 19th century, when one bill alone cost over £300,000 ($840,000).

Post office in the Houses of Parliament.

Clerks of the House of Lords.

The fees office disburses over £1,500,000 in payments each year and annual estimates of expenditures have to be included in the Civil Estimates and passed by Parliament in the same way that Army, Navy and Air Force estimates are passed.

Occupying five large rooms on the terrace front, the House of Commons library provides an up-to-date service and undertakes research for members. It contains standard works of reference and a reference room with current issues of about 1000 newspapers, periodicals, trade and technical journals, etc., with most foreign countries being represented.

Two records of proceedings in the House of Commons are made. One is the *Votes and Proceedings of the House of Commons* which contains only the record of the acts of the House, not the words spoken in debate. The other has come to be known as *Hansard*, after one of its original reporters, and contains a verbatim report of every debate that takes place in the House. Official arrangements for reporting proceedings in this way began in 1803, when re-

(Continued on page 315)

One Form Cuts Paperwork for Cakes by Mail

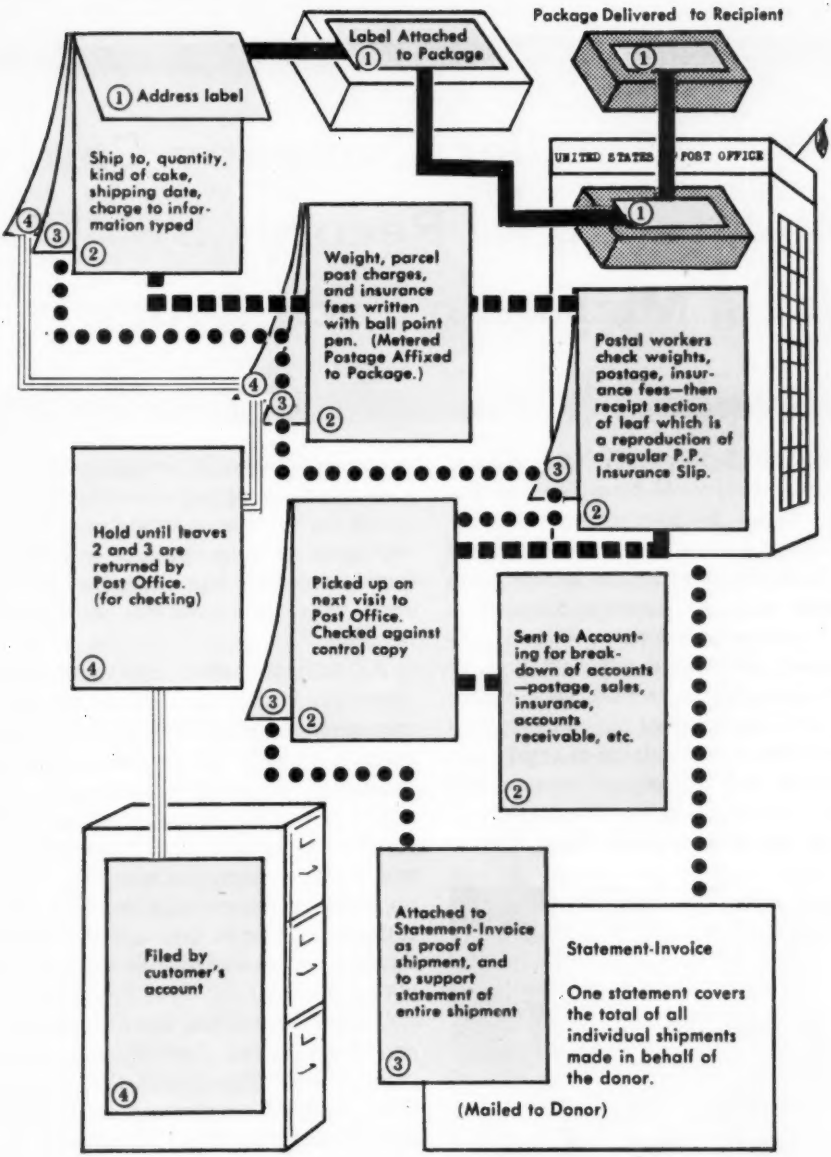
ALTHOUGH it enjoyed a growing volume of seasonal gift business during the weeks preceding Christmas, the Blue Ribbon Div. of Interstate Bakeries Corp., Kingston, Pa., at the same time suffered an annual administrative headache—how to process orders for a large quantity of fruitcakes for mail shipment without excessive paperwork during a rush season. In addition to its year-round customers, Blue Ribbon sells to firms who use cakes as good will business gifts. When a businessman wants to be remembered to several dozen customers at Christmas, he calls in a representative of Blue Ribbon, often an advertising specialty representative, and gives him an order with a list of names and addresses of people who are to receive his remembrance.

At Blue Ribbon, gift orders arrive by mail. Each requires many individual shipments with only one billing to each donor. Until recently, it was at this point that a vast amount of paperwork began. While production of cakes was carefully planned and executed, thousands of address labels were typed—one for each recipient—then eventually checked against orders, and affixed to the finished packages. Order forms with office copy, customer's (donor's) copy, and checking copy were prepared—as was a separate insurance slip to accompany each package to the Post Office.

William Clewell, office manager, and Earl Hess, traffic manager, soon saw the need of a better procedure. With the help of Herbert A. Wallace, of Baltimore Business Forms, a member of Business Forms Institute, they came up with a one-writing system which provided all copies of all forms needed, and greatly improved package labeling and processing orders to the Post Office. In addition to the new forms, Blue Ribbon needed only typewriters, ballpens, mailing scales, postage meters, donor's gift cards, and statement-invoice forms—items which were already in use.

Now, when orders for fruitcakes arrive, order writers use a four-part one-time carbon unit set and write all copies in two easy steps. The typist enters recipient's name, address, quantity and kind of cake, shipping date, and indicates if donor's gift card is to be enclosed. Under "Charge to," typist writes the name and address of donor.

Part one of the form is a Davac adhesive label that is pasted (after moistening with water) on the package. When the order is ready for shipment, weight, parcel post charges and insurance fees are entered on the balance of the form with ballpen or pencil. A group of orders is delivered to the Post Office with parts two and three, office and customers' copies, of the forms. Postal workers check weights, charges and insurance fees, then receipt the section of the form which is a reproduction of the regular parcel post insurance slip. Part four (checking copy) is held by Blue Ribbon to be checked against the duplicate and triplicate copies when they are returned from the Post Office.

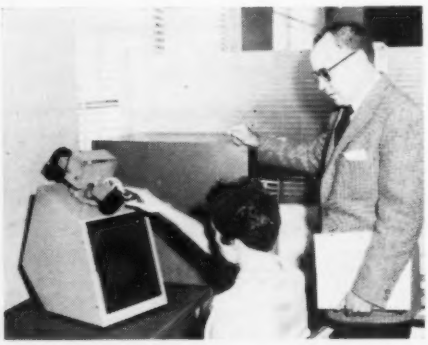


Duplicate (office) copy is then released to the accounting department for posting of sales, accounts receivable, postage and insurance expenses, etc. Triplicate (customer's) copy is the donor's proof of shipment and is attached to the statement-invoice which covers his entire group order. (See flow chart above.)

How a Smaller Company Can Miniaturize Its Records by Using Microfilm Techniques

BOSTON'S MASURY-YOUNG Co. is a century-old New England firm that started by processing whale oil. Now it is known for its Myco Method of floor maintenance, a service comprising complete surveys, comprehensive recommendations, personnel instruction and periodic consultations to help management exercise greater control over its own floor maintenance program through the training of employees.

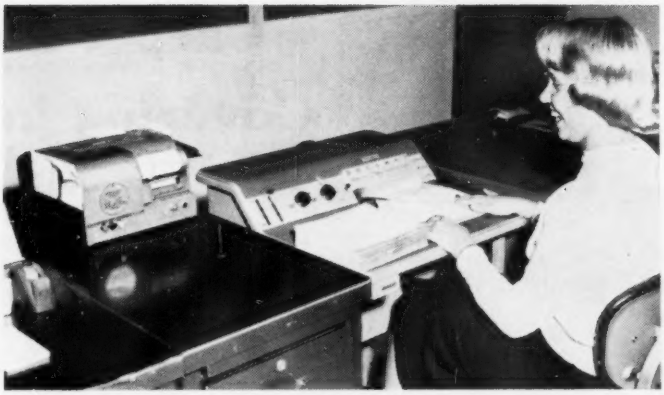
Going into the service business was quite an expansion for Masury-Young which had manufactured floor maintenance equipment. It brought with it a vast extension of paperwork problems which the company's existing personnel and space were not equipped to handle. Paper processing and storage were two areas where improvements were most needed.



More than 250,000 items are microfilmed yearly and filed in four drawers at the right of the Documat reader.

As salesmen went into customers' plants to make surveys, recommend maintenance procedures and prepare periodic reports, the paperwork began mounting. All this data had to be transmitted to headquarters, and in proper form to the customers. Correspondence and invoices covering the services took up more and more space and time. Because of the size of the company, all of this had to be handled with a minimum outlay of capital.

Space became an urgent problem, and management decided that some type of microfilming was the answer. Being a small company, it did not at first contemplate its own microfilming department, but had its documents photographed outside. This eliminated much of the space problem but it created one of referral. Also, documents were off the premises during



One of the regular clerks at Masury-Young Co. can photograph over 1000 documents in less than an hour with a Documat microfilm camera.

photographing. Management explored the possibility of doing its own microfilming and learned that an entire microfilming department could, under the right conditions, pay for itself in less than a year.

After considerable study, the company had Graphic Microfilming Co. of New England install a high-speed Documat microfilm camera and a Documat microfilm reader that would be simple to operate and handle adequately all of Masury-Young's needs. Now the company microfilms all correspondence that must be retained, paid invoices and vouchers, basic accounting data, corporate and accounts receivable records. Over 250,000 items are microfilmed yearly.

Once records are microfilmed, they are destroyed (with exception of basic accounting data). This has released valuable floorspace and made referral to documents easier and faster. Previously, the company had stored its original documents in a nearby warehouse. This necessitated traveling to and from the storage area and preparing requisitions. Delays in answering queries about invoices and other records consumed valuable clerical time.

Now, no bulky documents are stored on the premises. The entire microfilmed contents are housed in four drawers of a small eight-drawer cabinet located next to the Documat reader, where the records can be referred to in a matter of minutes. Any record can be scanned by regular personnel. Documents are stored chronologically by year, as it is within this framework that most frequent referral is made.

One reason that the microfilm operation is paying off is that especially trained personnel are not required. One of the department's regular clerks can photograph over 1000 items in an hour. According to W. B. Reed, assistant treasurer at Masury-Young, an integrated microfilming department requiring no specialized personnel can be one of the most economical operating tools for the smaller company faced with the need to process and store increasing volumes of paperwork. "Time and space, plus ease of access," says Mr. Reed, "more than make up for the expenditure involved."

Carpet as a Floor Covering in Offices

Installing carpet at Union Carbide Corp. (see photo on page 98).

CARPETS CUT NOISE levels in offices. They cut maintenance costs too. Most executives are familiar with the psychological advantages of good office carpeting; many less so with its acoustical properties. Few appreciate that carpeting is often more economical to maintain than other floor coverings.

Columbia University's Dr. Cyril M. Harris made a series of tests under laboratory conditions. Objectives of these tests were (1) to find out if carpet absorbs airborne noise to any significant degree; (2) to find out if the various characteristics of carpet itself affect its sound absorption efficiency; and (3) to find out whether carpet reduces impact noises significantly.

Five carpets were selected for the first test phase, differing in density of pile, depth of pile, backing material, texture, fibre and yarn weight. Selections were typical of those used in office areas where acoustical considerations are important, *i.e.* machine accounting rooms. These carpets were then tested in the reverberation chamber of the National Bureau of Standards. Measurements of standard sound absorption were made with and without the carpets and a range of Noise Reduction Coefficients (NRC) established.

Reverberation testing confirmed that the acoustical properties of carpet had been underestimated. It showed that four of the five carpets tested on 40 oz. hair underlays had a range performance equal to many conventional acoustical materials—an NRC averaging .55. Acoustical engineers consider any material with an NRC of .50 or more a significant noise absorbent. Fig. 1 shows how carpet's sound absorption coefficients compare with those of standard acoustical materials and other floor coverings. Figs. 2 and 3 show respectively (a) range of sound absorption performance of the five carpets; (b) relative effect of different types of underlays of carpet E (chosen be-

cause its performance was typical).

For the second test phase, a large number of carpets were chosen comprising the various characteristics of carpeting in which only *one* variable was changed. In this way it was possible to isolate and measure the effect on sound absorption of pile density, depth, backing material, different types and weights of underlay, texture, pile fibre. More than 500 tests of individual samples were made, employing the Impediance Tube technique in an acoustical laboratory. Figs. 4, 5, 6, 7, 7a, 8, 8a, and 9 show the absorption coefficients of various carpets with one variable. Findings of the second test phase were as follows:

• *Depth of pile* makes considerable differences in absorption efficiency. The deeper the pile, the greater the absorption.

• *Density of pile* is an important factor affecting sound absorbency. As a general rule, the denser the pile, the greater the absorption.

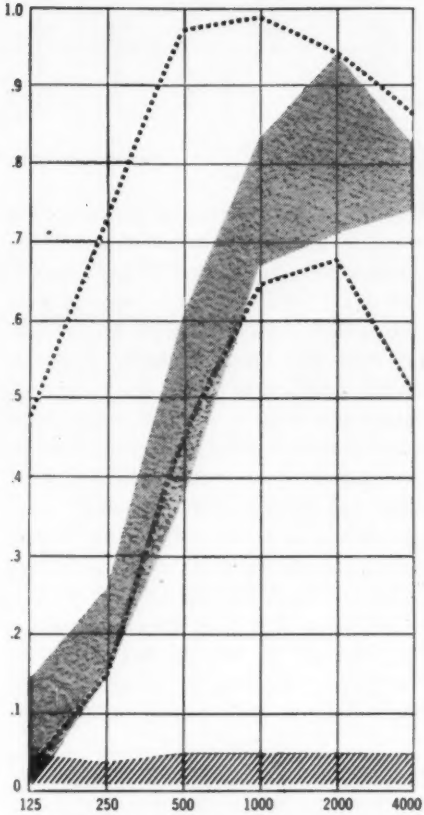
• *Backing materials.* Jute and kraft-cord perform well. Heavily starched and latexed backings tend to increase efficiency at low frequencies, the contrary at high. Usually, carpets with latter types of backings have lower overall NRCs.

• *Underlays* increase sound absorption of all soft floor coverings. Essential if maximum sound absorption is to be realized. Hair felt, foam rubber, and combinations of the two, perform equally well. Sponge rubber is less efficient.

• *Pile structure (texture)* has little effect on carpet's sound absorption. Cut pile and loop pile perform equally well.

• *Fibre content* made very little difference in absorption. Wool, cotton, nylon, acetate rayon and viscose rayon carpets of the same construction had similar absorption coefficients.

A special tapping machine—the only



Highest and lowest sound absorption values of perforated, cellulose fibre acoustical tiles between ½" and 1".

Highest and lowest sound absorption values of carpets A, B, D and E in Fig. 2.

Highest and lowest sound absorption values of terrazzo, concrete, wood, linoleum*, asphalt*, rubber*, cork*, marble and glazed tile floors. *On concrete.

Fig. 1. Comparison of carpet's sound absorption coefficients with other materials.

Frequency cycles/second	Carpet A	Carpet B	Carpet C*	Carpet D	Carpet E
125	0.00	0.03	0.08	0.12	0.08
250	.25	.13	.27	.22	.22
500	.53	.36	.39	.60	.55
1,000	.66	.66	.34	.83	.69
2,000	.70	.93	.48	.79	.72
4,000	.73	.81	.63	.74	.75
Noise Reduction Coefficients	0.55	0.50	0.35	0.60	0.55

*Identical to Carpet B with Latex Backing

Fig. 2 (at left). Sound absorption performance of five different carpets on one 40 oz. hair felt underlay.

Fig. 3 (below). Relative effect of different underlays on sound performance of carpet E.

Frequency cycles/second	On Concrete Floor	One 40 oz. Hair Felt Underlay	Two 40 oz. Hair Felt Underlays	Foam Rubber Underlay
125	0.02	0.08	0.13	0.09
250	.06	.22	.52	.25
500	.14	.55	.67	.58
1,000	.37	.69	.73	.70
2,000	.60	.12	.74	.70
4,000	.66	.75	.70	.71
Noise Reduction Coefficients	0.30	0.55	0.65	0.55

one of its kind in the U.S.—was built specially for the third test phase. Three conditions were checked: bare floors—¾″ oak in mastic on 6″ concrete slab; carpet over this floor; carpet plus underlay over this floor. Acoustic measurements were made in the room directly below the tapper. Overall noise level was measured with a General Radio Co. sound level meter while tapping unit was in operation. Results were computed in terms of Impact Noise Reduction values in decibels* with bare floors as a basis of comparison.

Due to a dearth of data with which the findings of this testing could be compared (the tapping machine technique has not been widely used in this country), it was decided to report in principle only rather than list decibel readings that lack comparability. This phase showed that compared to an intense level of solidborne impact noise on bare floors, carpet *without* underlay reduced noise level significantly. Carpet *with* underlay showed slightly greater noise reduction efficiency.

Subsequent tests by Prof. Harry E. Rodman and Prof. Carl J. Kunz Jr., both of Rensselaer Polytechnic Institute, Troy, N.Y., tend to confirm Dr. Harris' findings. They found (1) that carpet can cut noise in an office by as

*Sound pressure can be rated conveniently on a logarithmical scale called the decibel scale. Sound levels above 85 decibels are usually uncomfortable for the average person.

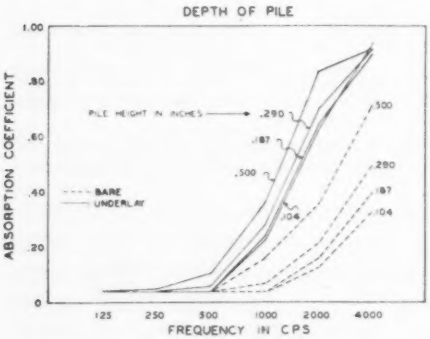


Fig. 4. Normal sound absorption according to thickness of carpet's pile.

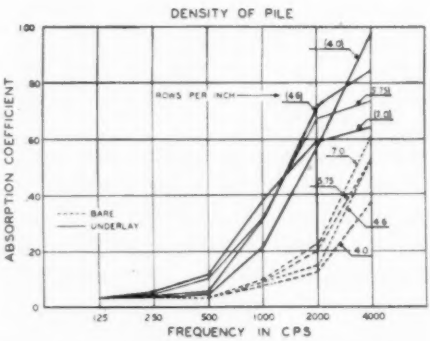


Fig. 5. Normal sound absorption according to carpets' density of pile.

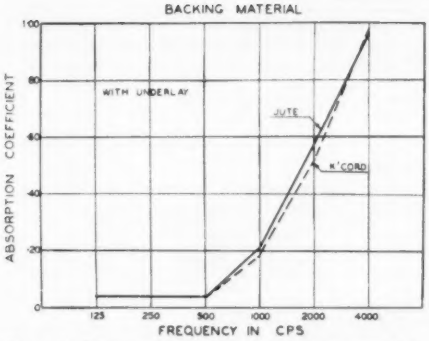


Fig. 6. Normal sound absorption according to carpet backing materials.

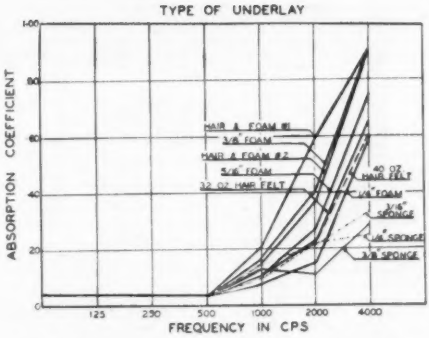


Fig. 7. Normal sound absorption of underlays without a carpet covering.

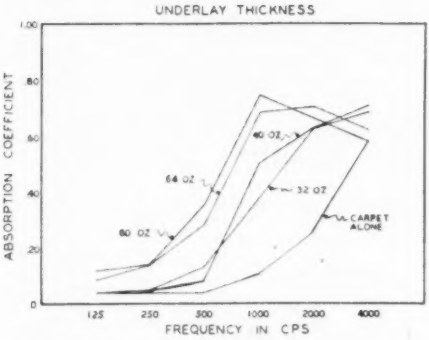


Fig. 7a. Normal sound absorption of underlays according to thickness.

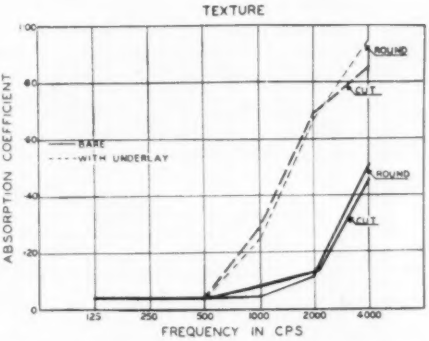


Fig. 8. Normal sound absorption according to carpets' texture (also see Fig. 8a).

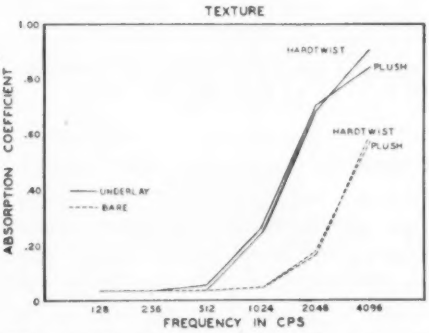


Fig. 8a. Normal sound absorption according to carpets' texture (also see Fig. 8).

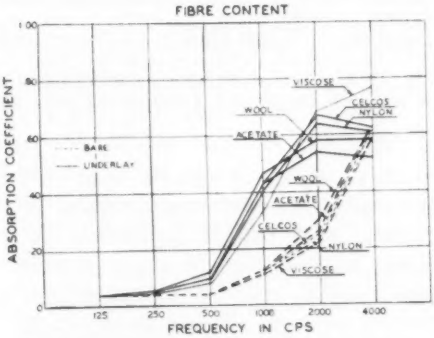


Fig. 9. Normal sound absorption according to carpets' fibre content.

HEAVY CONDITIONS OF SOIL AND CONGESTION

	Cleaning Requirements for Each Type of Operation							
	DAILY			WEEKLY		MONTHLY	SEMI-ANNUALLY	
	Vacuum	Dust Mop	Buff	Spot Clean	Wet Mop	Refinish	Complete Shampoo	Total Labor Cost + Supplies Cost = Total Annual Main. Cost for all operations per 1,000 sq. feet
Minutes per 1,000 sq. ft	24	15	24	36	48	300	240	
Annual Cost of Individual Operations Per 1,000 Square Feet								
Carpet	$130.00			$39.00			$10	$179.00 + $10.00 = $189.00
Non-Carpet		$81.25	$130.00		$52.00	$75.00		$338.25 + $45.00 = $383.00

MEDIUM CONDITIONS OF SOIL AND CONGESTION

	Cleaning Requirements for Each Type of Operation								
	DAILY			WEEKLY		BI-MONTHLY	ANNUAL		
	Vacuum	Dust Mop	Buff	Spot Clean	Wet Mop	Refinish	Traffic Area Shampoo	Complete Shampoo	Total Labor Cost + Supplies Cost = Total Annual Main. Cost for all operations per 1,000 sq. feet
Minutes per 1,000 sq. ft.	18	11	18	30	24	240	240	240	
Annual Cost of Individual Operations Per 1,000 Square Feet									
Carpet	$97.50			$32.50			$2.50	$5.00	$137.50 + $8.00 = $146.00
Non-Carpet		$59.60	$97.50		$26.00	$30.00			$213.10 + $30.00 = $243.00

LIGHT CONDITIONS OF SOIL AND CONGESTION

	Cleaning Requirements for Each Type of Operation								
	DAILY			WEEKLY		BI-MONTHLY	ANNUAL		
	Vacuum	Dust Mop	Buff	Spot Clean	Wet Mop	Refinish	Traffic Area Shampoo	Complete Shampoo	Total Labor Cost + Supplies Cost = Total Annual Main. Cost for all operations per 1,000 sq. feet
Minutes per 1,000 sq. ft.	12	9	12	24	18	180	180	180	
Annual Cost of Individual Operations Per 1,000 Square Feet									
Carpet	$65.00			$26.00			$1.90	$3.80	$96.70 + $7.00 = $104.00
Non-Carpet		$48.75	$65.00		$19.50	$22.50			$155.75 + $24.60 = $180.00

Fig. 10. Costs of maintaining carpeted and non-carpeted areas under different conditions of soil and congestion. Labor costs were figured at $1.25 an hour, five-day week.

much as 50%; (2) that the noise level in carpeted corridors can be some 20 decibels lower than in uncarpeted corridors; and (3) that the sound absorption material required to reduce distracting noises in offices is more ideally located on the floor than on the ceiling.

Conducted by Industrial Sanitation Counselors, Louisville, Ky., another study set out to discover the relative costs of maintaining carpeted versus non-carpeted floors. It was agreed that the following standards of comparison would be observed throughout: labor costs based on a $1.25 hourly wage; floor area for comparison to be 1000 sq.

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For More Information Circle No. 212

Installation crew of Simon Manges & Sons laying some of the 15 acres of 100% Dynel carpet, made by James Lees & Sons, in the new world headquarters office building of Union Carbide Corp., New York.

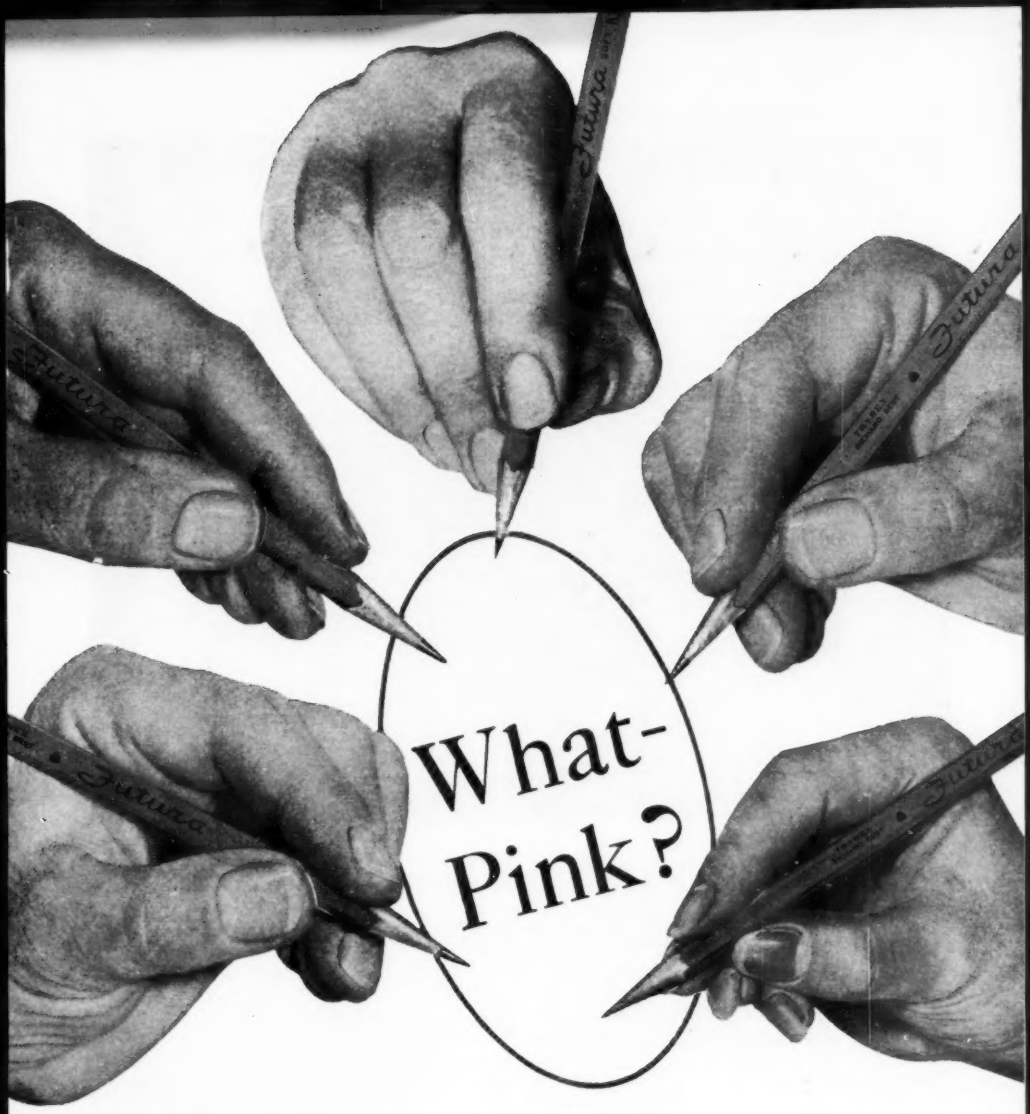
ft.; time rates based on a self-operated, on-job service, using ISC's Work Standard System*; servicing cost based on 260 servicings annually; all cost figures based on areas being maintained at a 90 minimum maintenance level.

Comparisons were made under three types of use conditions: (1) heavy conditions of dirt and congestion, *e.g.* the grill and center lobby of the Waldorf-Astoria; (2) medium conditions, *e.g.* average office areas; and (3) light conditions, *e.g.* executive reception rooms. Fig. 10 shows a complete breakdown of the costs encountered in maintaining carpeted and non-carpeted areas under the three types of conditions. It shows under heavy conditions that carpet produces an annual savings of $194 per 1000 sq. ft.; under medium conditions, $98 per 1000 sq. ft.; under light conditions, $77 per 1000 sq. ft.

To arrive at the annual cost for each operation, multiply time required (converted to hours) x $1.25 x 260 days. For instance, under heavy conditions: (1) Daily vacuuming takes 24 minutes or 2/5 of an hour. Hence 2/5 x $1.25 = $.50 per day x 260 = $130 (annual vacuuming cost). (2) Weekly spot cleaning takes 36 minutes or 3/5 of an hour. 3/5 x $1.25 = $.75. $.75 x 52 = $39. (3) Monthly refinishing takes 300 minutes or five hours. 5 x $1.25 = $6.25 x 12 = $75. (4) Shampooing (in areas of heavy congestion and dirt the entire carpeted area is shampooed twice a year). Thus the annual shampooing cost is 240 minutes = 4 hours x $1.25 = $5 x 2 = $10. The total annual maintenance cost appearing in Fig. 10

(Continued on page 317)

*Involves trained workers, using quality supplies and effective equipment with competent supervision. Time motion studies of each operation were made and checked against substantial experience with maintaining typical carpeted and non-carpeted areas in such institutions as New York's Waldorf-Astoria.



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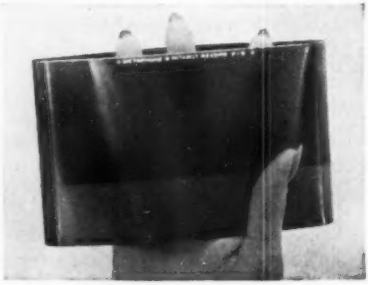

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For More Information Circle No. 262

How to Use Break-Even Data For Making Decisions

SPENCER A. TUCKER, P.E.
Martin & Tucker, Management Consultants, Little Neck, N. Y.

IN MANUFACTURING, nothing stands still: market conditions change, as do consumer wants and habits; products are developed and channels of distribution changed; equipment deteriorates and newer equipment becomes available; new skills become necessary to meet changing times and some operations become obsolete. Against these change patterns, management must examine and revise; evaluate and decide. Should it reduce prices, sell equipment, pare its technical and administrative staff? Or should it expand its facilities, enlarge buildings, add new machines, open a district sales office, revise product mix and boost prices? Which should be done and in what degree?

There is no pat answer for all companies; the answer depends on the specifics within the company itself. Not all will respond to the same decision in the same way. A planned move within one company may react favorably, yet be poison to another company of the same size in the same industry. The reason lies in the company's economic "personality."

For optimum profits and growth, managerial talent must cope with the infinite number of variables typically present in all manufacturing — the volatility of external market influences and the normal gyrations of performance internals in its own company—considering the company's economic personality. For example, equipment additions will affect the return on investors' capital to a degree, or the level of the creditors' stake in the business to a degree, depending on method of financing. It will also raise the company's break-even point a certain amount, and shrink the range of sales over which the company can earn a profit. Expansion also will make the company, to an extent, more vulnerable to bankruptcy in recessions; but in boom times, to an extent, it will provide it with more profit. The amounts of these various impacts are different for all companies. The same expansion that can be safely accomplished by one could be decidedly dangerous for another of the same size and activity.

Decision-making should be a planned compromise between operating risk and gain; balancing borrowed and owned capital; rationalizing profits from performance with return on investment. One effective tool for decision-making and a key to a company's economic response mechanisms, is break-even data. From this data, the break-even chart is constructed to serve as the mirror of the company's economic personality. Here is found the reflection of the company's economic traits, its vulnerability to recessions, its elasticity to change,

TYPICAL P & L STATEMENT		
SALES		$12,000,000
Total Manufacturing Cost	$8,000,000	
Selling & Admin. Expense	2,000,000	
TOTAL EXPENSES		$10,000,000
NET PROFIT before taxes		2,000,000

Fig. 1.

the cumulative effects of creeping changes, its production effectiveness, its costs of doing business. Management can test *in advance* the effect of its decisions. Break-even data will tell:

1. Additional sales that must be made at the same profit to justify expansion or price reduction.

2. How much profits will drop if these additional sales are not obtained.

3. How much different costs must drop to justify expansion or price reduction, maintaining the same profit, if sales can't be increased.

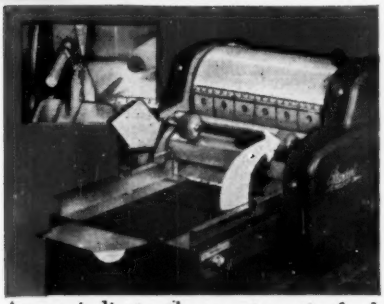
4. How much more sales must be made at the same profit and/or how much must costs drop to balance an increase in administrative staffing.

5. How much the range of profitable sales will shrink if the sales in-

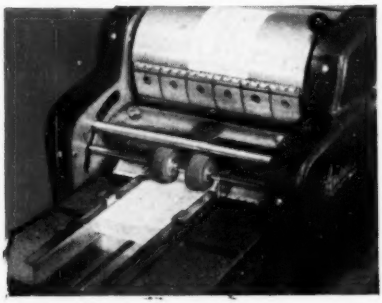
	Total Costs	Kind of Cost: Time or Volume?	Standby (Time) Expenses	Variable (Volume) Costs
Direct Material	$3,500,000	volume	——	$3,500,000
Productive Labor	2,000,000	volume	——	2,000,000
Manufacturing Overhead	2,500,000	both	$2,000,000	500,000
Administrative Expenses	1,000,000	both	750,000	250,000
Selling Expenses	1,000,000	both	450,000	550,000
TOTAL EXPENSES	10,000,000		3,200,000	6,800,000

P & L BREAKDOWN STATEMENT		
SALES		$12,000,000
Total Variable Expenses	$6,800,000	
Total Standby Expenses	3,200,000	
TOTAL EXPENSES		$10,000,000
NET PROFIT before taxes		2,000,000

Fig. 2.



Arrow indicates how automatic feed swings away for loading tray or for hand feeding. (Inset) Exclusive, self-leveling stripper pin with optional blades for positive feeding of paper or card stock.



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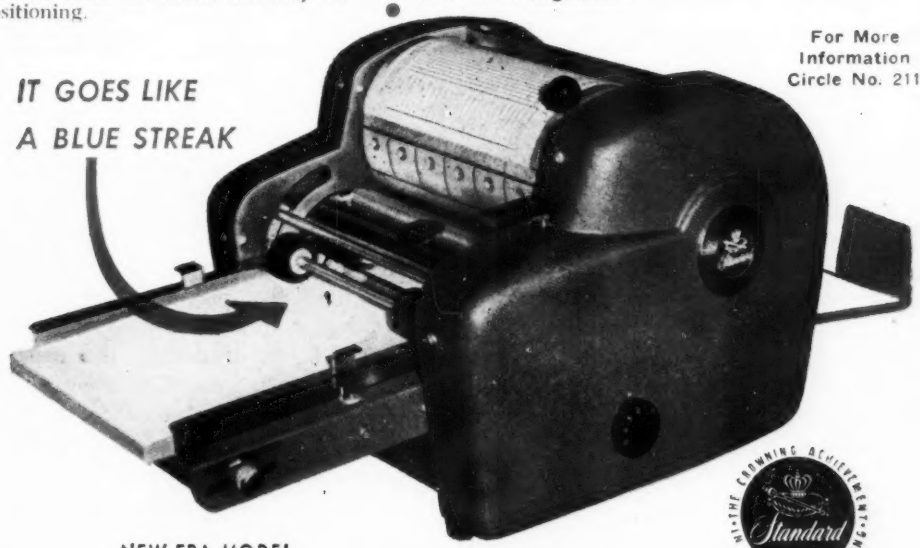
For More Information Circle No. 211

IT GOES LIKE A BLUE STREAK



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crease or cost reduction is not accomplished.

6. How a revision of product mix will affect the range of profitable sales and overall profits.

7. Which product mix will give the greatest profit and least vulnerability for the same sales level.

8. How much additional profits or reduction of losses are affected by bonus plans.

9. The effect of marginal pricing to recover fixed costs.

10. Long - range profit performance, etc.

Every positive act resulting from a managerial decision brings some of negative vulnerability, depending on the specifics of a company's operating structure. While two companies can have identical break-even points, the quality of breaking even can be considerably different.

Variable, fixed and partially variable costs enter into every operation. Variable costs change directly with sales or other units of volume, *viz:* productive labor, direct materials, sales commissions, etc. Fixed costs remain the same regardless of output, *viz:* depreciation, insurance, interest charges, etc. Partially variable costs do not vary directly with sales or output, but change as required, *viz:* administrative expenses, developmental costs, etc. For purposes of illustration, fixed costs are combined with the partially variable expenses and considered as *total standby expenses.*

A break-even chart shows the level of variable and standby expenses in relation to sales or other output units, and shows how much sales are required to break even. The break-even point is at the sales level which produces no profits and no losses. A break-even chart is constructed with data from the profit and loss statement, revised to show variable and standby expense elements. Fig. 1 shows a typical operating statement in condensed form. Fig. 2 shows the same data prepared for control and break-even purposes.

Fig. 3 (page 110) is a break-even chart constructed from the data in Fig. 2. The chart is developed in square form with a diagonal sales line drawn from the lower left to the upper right corner. The bottom horizontal boundary of the chart (x axis) is scaled in dollars to a level of sales which the company believes to be its present maximum capacity. The left vertical line (y axis) is the expense scale. Since standby expenses are incurred at all sales levels, the expense line starts at the value of these and ends at the total expense point. As sales vary from 0 to $12 million, total expenses go from $3.2 million to $10 million. Total expenses are:

At zero sales:

Standby expenses $3.2 million
+ variable expenses $0

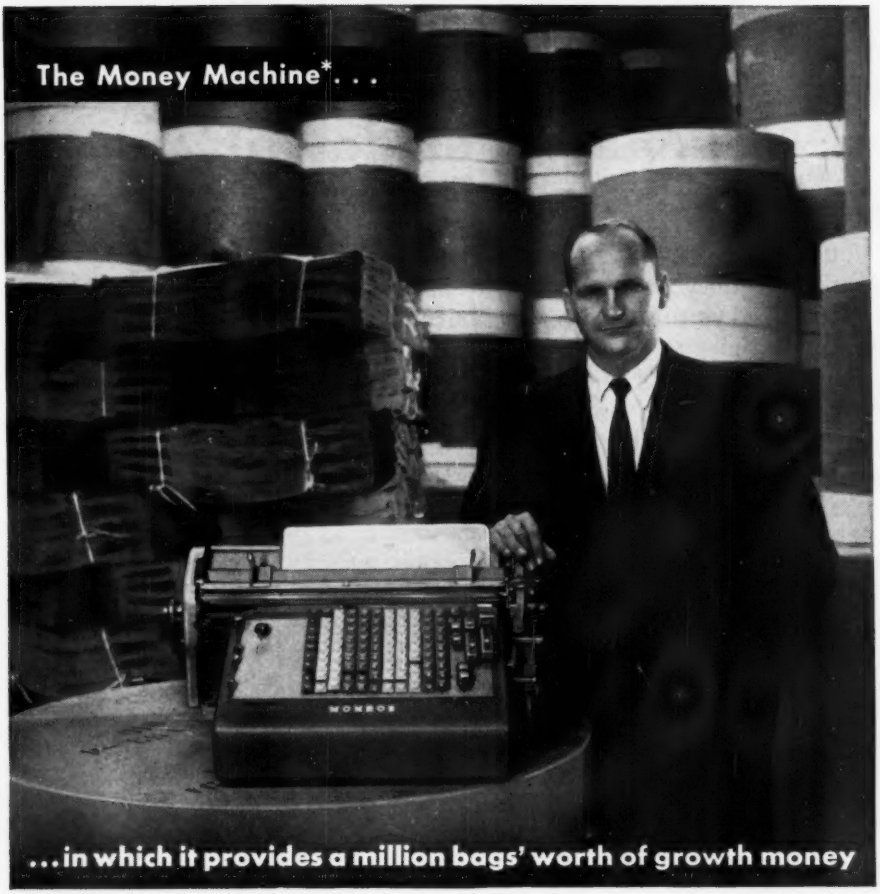
Total expenses $3.2 million

At $12 million sales:

Standby expenses $3.2 million
+ variable expenses $6.8 million

Total expenses $10 million

The intersection of the sales and expense lines is the break-even point. The lower wedge formed by the intersecting lines is the loss zone; the upper wedge, the profit area. Sales above this point are made at a profit; those below the break-even point show an operating



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loss. Notice that as sales increase, the opening in the wedge increases. This is not only an increase in the amount of profit dollars but also is an *increase in the percentage of profit made on sales.* This is due to a better utilization of standby expenses. Since additional capital is required to support higher sales levels, this is an important consideration for the stockholder who looks for a return on his investment great enough to compensate for risk. At a sales volume of $12 million, the profit is 16.7% on sales ($2,000,000) and at $16 million it is 23.7% ($3,800,000).

It is not necessary to draw a chart to find out the break-even point for one specific set of conditions. A simple formula for finding the break-even point is:

$$\text{Break-even point} = \frac{\text{Standby Expenses}}{(1 - \text{Variable Cost Percentage of Sales})}$$

$$= \frac{\$3.2 \text{ million}}{(1 - \$6.8/\$12)}$$

$$= \text{approximately } \$7.4 \text{ million, as in chart.}$$

Since the break-even chart shows relationship between expenses, sales and profits, other simple formulas will prove of value in the later decision-making

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$$\text{Profits} = \text{Sales} \times (1 - \text{Variable Cost Percentage of Sales}) - \text{Standby Expenses}$$
$$= \$12 \text{ million} \times (1 - \$6.8/\$12) - \$3.2 \text{ million}$$
$$= \$2 \text{ million, as in Figs. 1 and 2.}$$

$$\text{Sales} = \frac{\text{Net Profit} + \text{Standby Expenses}}{(1 - \text{Variable Cost Percentage of Sales})}$$
$$= \frac{\$2 \text{ million} + \$3.2 \text{ million}}{(1 - \$6.8/\$12)}$$
$$= \$12 \text{ million, as in previous exhibits.}$$

examples (see above).

Break-even points do not stand still, but move with decisions, actions and conditions in every company. When it goes down, then the company starts to make a profit earlier on its sales line because there is less sales pressure needed before a profit appears. When it rises, the reverse is true and the company is less elastic and able to earn a profit over a narrower range of sales.

Fig. 4 shows the effect of two types of total expense reductions and how these lower the break-even point. Total expenses have been reduced from $10 million to $9 million. In company A, the $1 million reduction was made in standby expenses; in company B, variable expenses were reduced. The solid expense line represents the lowered standby expense reduction and lowers the break-even point to approximately $5 million in sales instead of the previous $7.4 million. The standby expense reduction of $1 million allowed the company a profit on an additional $2.4 million of sales.

The dashed expense line shows Company B with the same standby but a reduced variable expense level and a break-even point at approximately $6.2 million in sales. Obviously, the variable expense reduction is not as desirable as the standby reduction. The only advantage of variable expense reduction comes *after* Company B passes the $12 million sales level. But at all levels below that, profits are less and losses start $1.2 million earlier in sales. By reducing standby expenses, Company A makes a profit of $1.2 million in sales (between $5 million and $6.2 million) while Company B is sustaining losses.

Companies with higher levels of standby expenses, those that have invested more heavily in equipment, can make a higher profit than the more elastic companies in booming times but are more sensitive to the slightest downward shift in prices. These companies must exert constant sales pressure to absorb their higher fixed costs. Company B in Fig. 4 earns the same profit as Company A at the $12 million sales level; but at the $7 million sales level, earns about half the profits of Company A. However, above $12 million, Company B makes more profit than Company A.

Decisions which add standby costs at Company B should consider the prob-

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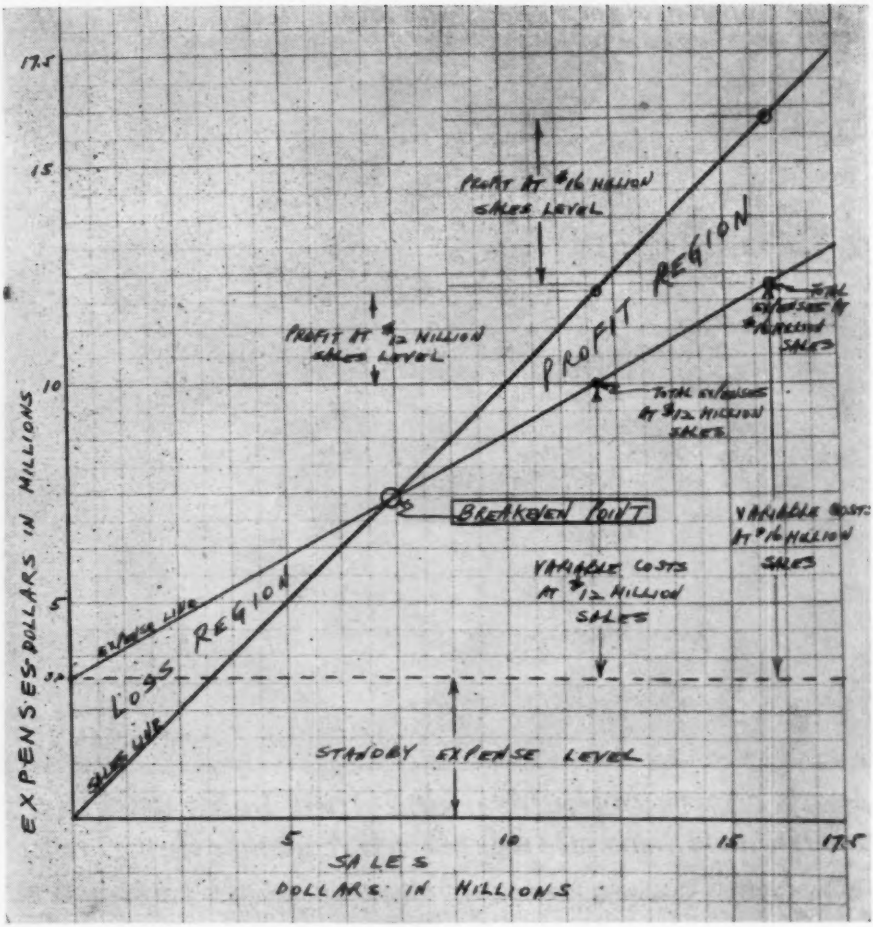

Fig. 3.

able sales potential above the $12 million mark. If $12 million is close to maximum sales capacity for a given product mix, then expanding with the hope of gaining higher profits from additional sales will place the company in jeopardy with little potential gain. Then again, if $12 million in sales is not close to capacity and the company can justify its expansion by a revision in product mix, the risk is reduced and better justified by the potential gain. This characteristic of risk vs. gain is shown by the profit and loss wedge. The more acute the angle, the more conservative the operating point and vice versa. Angle A, B, C represents Company A; D, E, C, Company B.

Unfortunately, break-even points rise. When the economy goes unpoliced,

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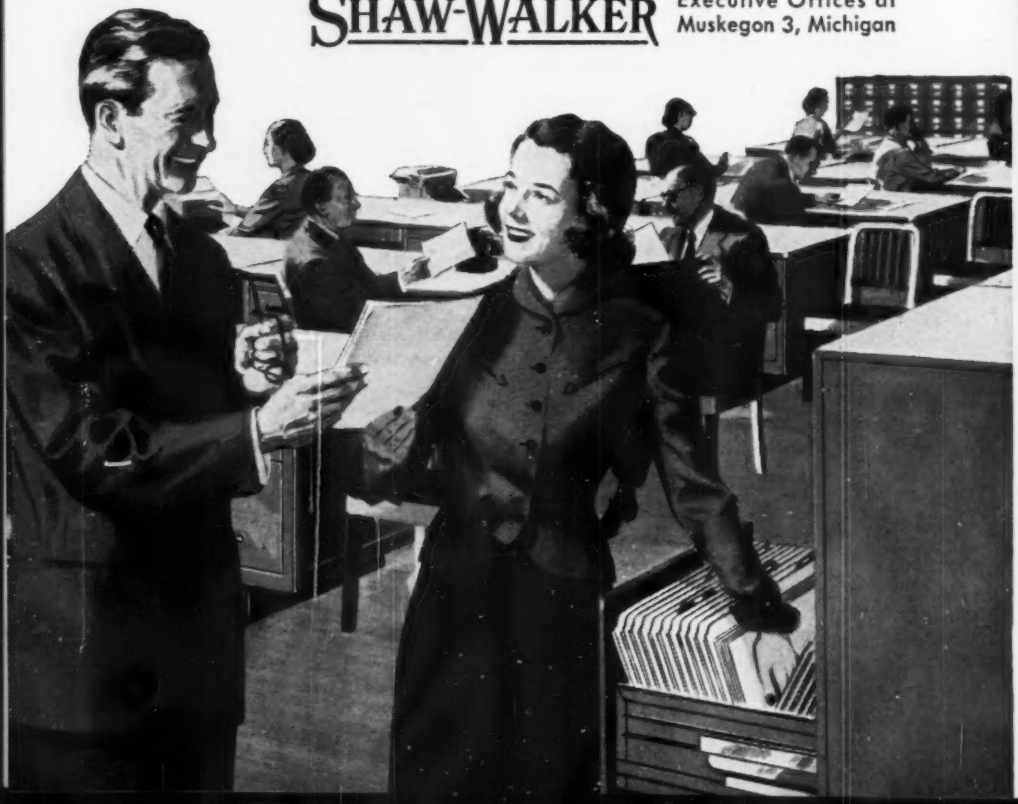

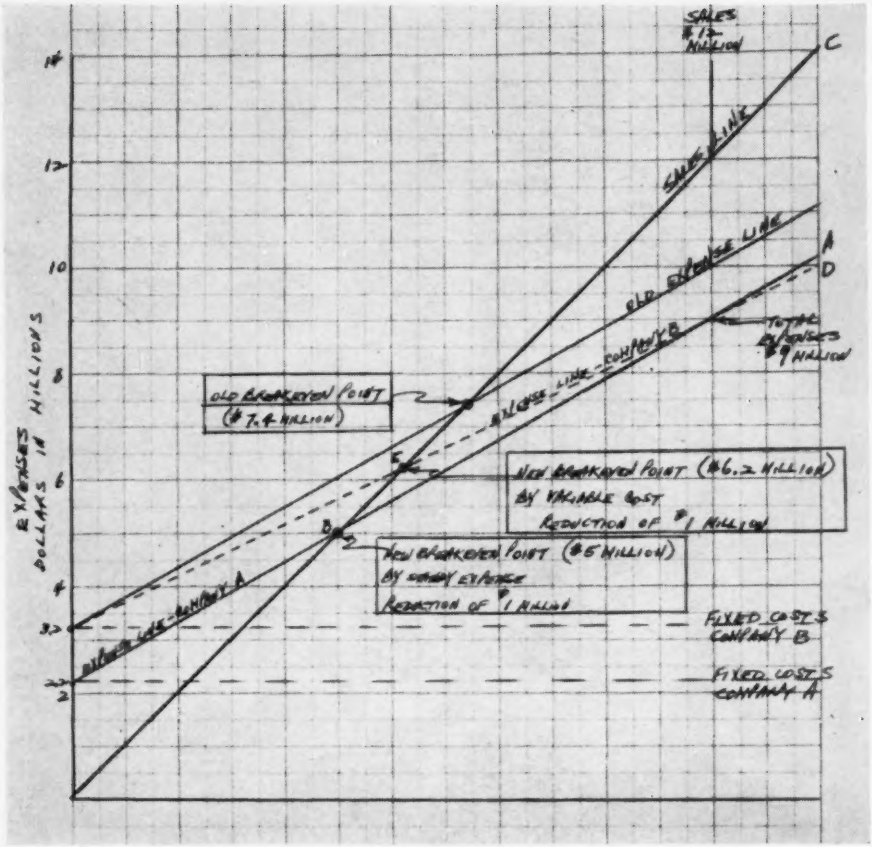

Fig. 4.

creeping change can sometimes raise the break-even point as high as a planned expansion, or a planned reduction in prices. Lowering it under those conditions requires major surgery on deep-rooted performance patterns, and is not easy.

The location of the break-even point is affected by changes in standby and/or variable expenses, level of selling prices, and the profit margin expected. Almost every managerial act affects expenses; some positively, some negatively. Typical positive acts which raise standby expenses are: enlarging building, adding equipment, adding district sales offices, doing more "make" than "buy," etc. These are useful, functional and not wasteful even though they may not be economically feasible for all companies. Negative acts which raise standby costs are usually the result of managerial omissions, failures in policing or permissiveness: excess

Another example of Addressograph-Multigraph cost-cutting

Shown above in Whirlpool's St. Joseph automatic washer plant are (right) H. J. Coon, Mgr., Systems and Procedures, and (left) J. L. Schoonover, Procedures Analyst

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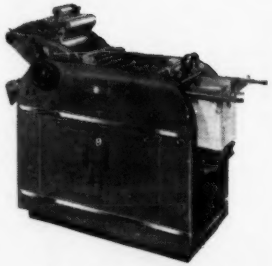

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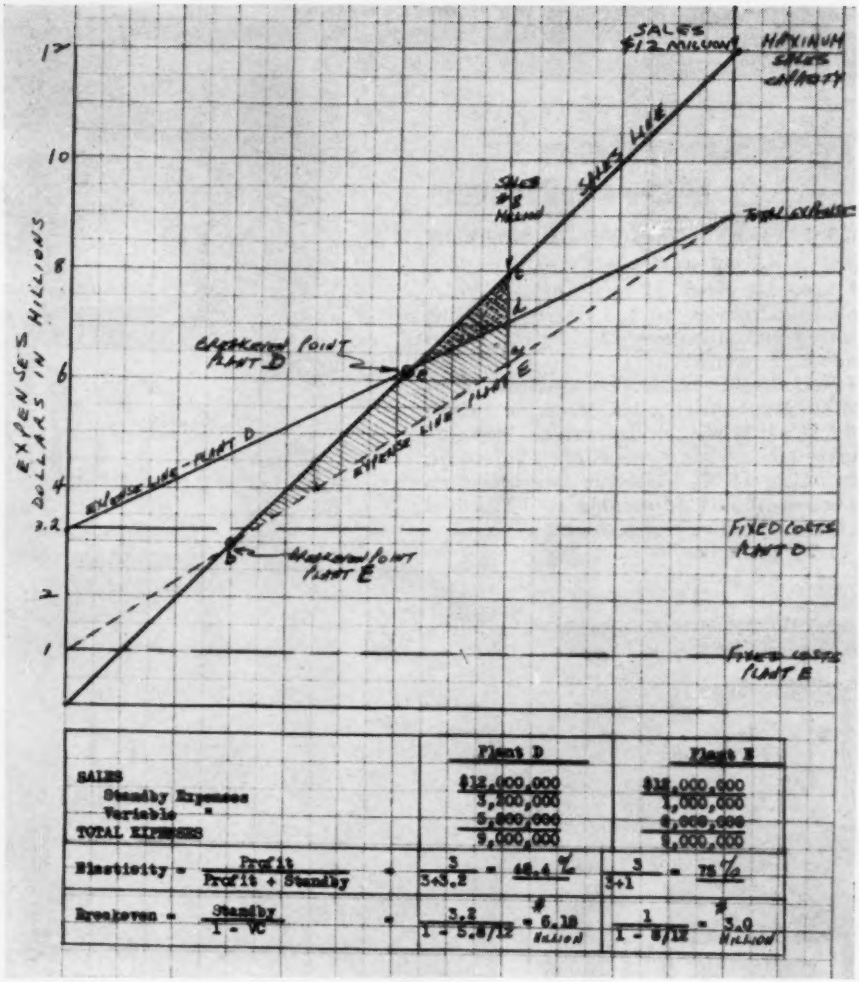

	Plant D	Plant E
SALES	$12,000,000	$12,000,000
Standby Expenses	3,200,000	1,000,000
Variable "	6,000,000	8,000,000
TOTAL EXPENSES	9,000,000	9,000,000
Elasticity = Profit / Profit + Standby =	3 / 3+3.2 = 48.4 %	3 / 3+1 = 75 %
Breakeven = Standby / 1 - VC =	3.2 / 1 - 6/12 = $6.4 Million	1 / 1 - 8/12 = $3.0 Million

Fig. 5.

clerical work, unjustified "front" expenses, retaining permanent crews not fully utilized, "playing it safe" or "just in case" staffing of technical and executive skills, etc.

Variable costs, of course, are affected by the type of product, its design, materials required, inventory vulnerability to obsolescence, labor productivity, etc. Selling prices are affected by product mix, market caprices, etc.

The ability to cope with competition is revealed by the break-even chart. Fig. 5 shows two companies, in the same industry, which make the same level of profits at maximum sales ca-

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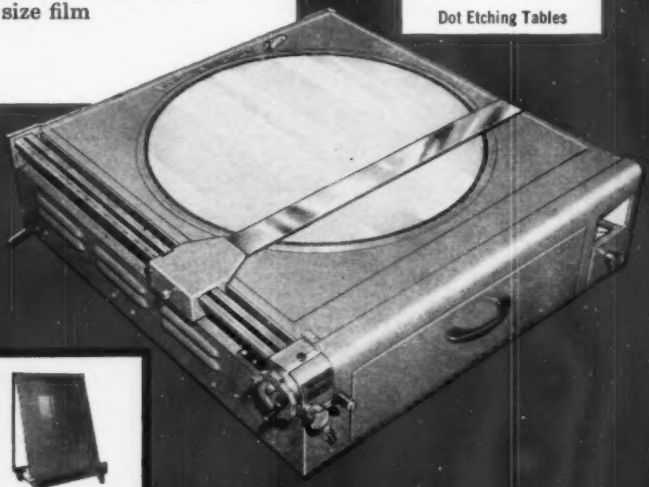

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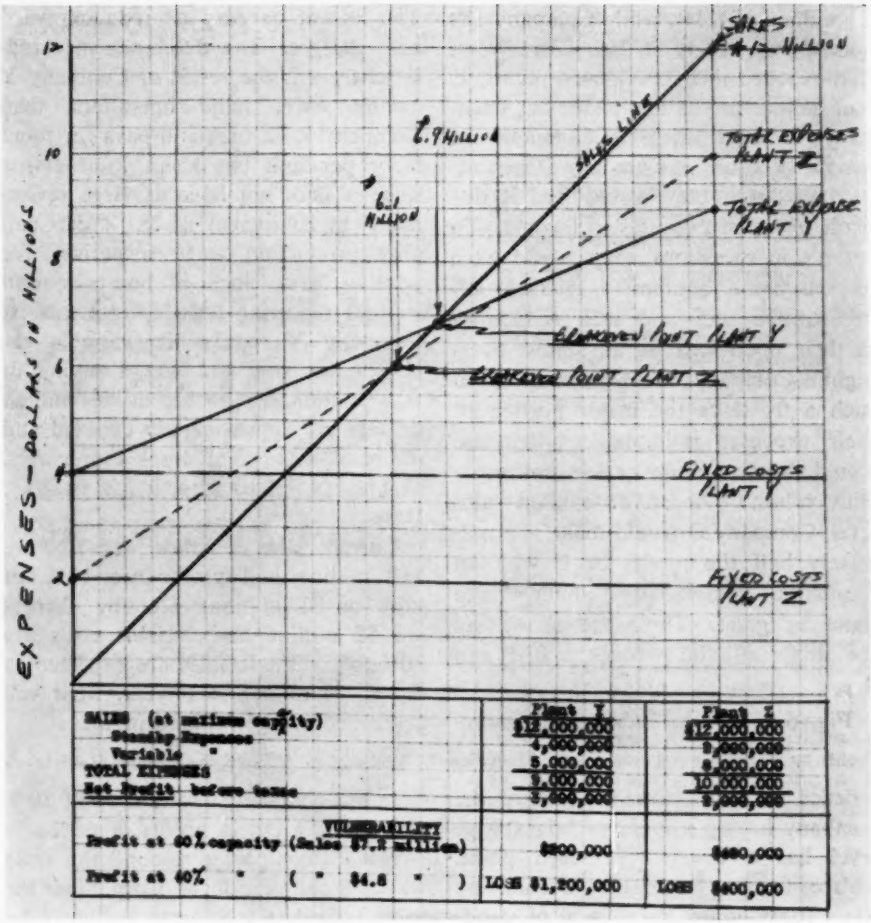

	Plant Y	Plant Z
SALES (at maximum capacity)	$12,000,000	$12,000,000
Standby Expenses	4,000,000	2,000,000
Variable "	5,000,000	8,000,000
TOTAL EXPENSES	9,000,000	10,000,000
Net Profit before taxes	3,000,000	2,000,000
VULNERABILITY		
Profit at 60% capacity (Sales $7.2 million)	$800,000	$480,000
Profit at 40% " (" $4.8 ")	LOSS $1,200,000	LOSS $400,000

Fig. 6.

pacity. However, below that maximum point, effects are very different. The composition of their respective total costs are shown in the box on the chart. The reason for these costs is simple. Company D bought additional equipment as a panacea for higher profits, and employed more technical and administrative people than they needed without testing the effects of these moves in advance. They obtained low productivity from their production people and failed to police creeping change. On the other hand, Company E used older equipment but squeezed every last cent out of it, did not have elaborate offices, subcontracted their technical work, and had a tight control on methods, procedures and costs.

Company E's break-even point was

$3 million in sales, while Company D's was approximately $6.2 million. When they reached their break-even points, E had neither profits nor losses but Company D was losing $3.2 million in *profits*. Because of Company D's standby cost level, they would find it difficult to adjust expenses to income. To survive in recessions, they would have to sell some equipment, reduce administrative staff and seek economies in their operations — all almost overnight. Company E would not be in such a fix since the major portion of their expenses is variable and these would decrease more or less uniformly with volume. At an $8 million sales level, Company D would make approximately half the profits of E with an economic vulnerability about three times as great. These are shown by the angle of the wedges a, b, c and d, e, c.

Fig. 6 shows the break-even characteristics of two companies, where the company having a *higher* total expense level has a *lower* break-even point. This can only occur where a company has a substantially lower level of standby expenses. At $8 million in sales, both have the same total expenses and profits. But if this sales level is nowhere near maximum capacity, then Company Y will enjoy large profit margins up to capacity and the double standby expense level appears justified. If this sales level is close to practical operating maximums, then effort should be made to reduce standby charges. This is not as easy as reducing variable charges. The difference in standby charges is the result of Company Y having fewer hand operations than Company Z. Z uses and pays for more labor per unit but keeps itself elastic since it does not have as large investments in equipment as Y. Z can employ production wage incentives for positive gain since it boosts output without requiring fixed investments. If Company Y reduces its variable expenses this way and gets a saving of $0.5 million, its profits at $8 million in sales are approximately doubled and the break-even point drops appreciably.

Making Decisions With Break-Even Data

Current sales of Jones Mfg. Co. are $10 million and profits are 10% of sales or $1 million. Standby charges are $2 million and variable costs are 70% of sales. If sales are expected to dip to $8 million next year, what will profits be? Apply the formula:

Profits = $8 million x (1 — .7) — $2 million = $400,000 or 60% of the former profit level.

In this company, a sales drop of 20% resulted in a cut in profits of 60%.

Not all companies respond the same way. Smith Products Corp. (in the same industry) with same current sales and profits have a fixed expense level of $5 million with variable costs 40% of sales. They anticipate a similar drop in sales next year and want to know in advance how their profits will be affected. The same formula applies:

Profits = $8 million x (1 — .4) — $5 million = a loss of $200,000.

A sales drop of 40% resulted in elimination of profits, and a loss. The impact on Jones Mfg. Co. is a drop of $600,000 in profit margin; Smith

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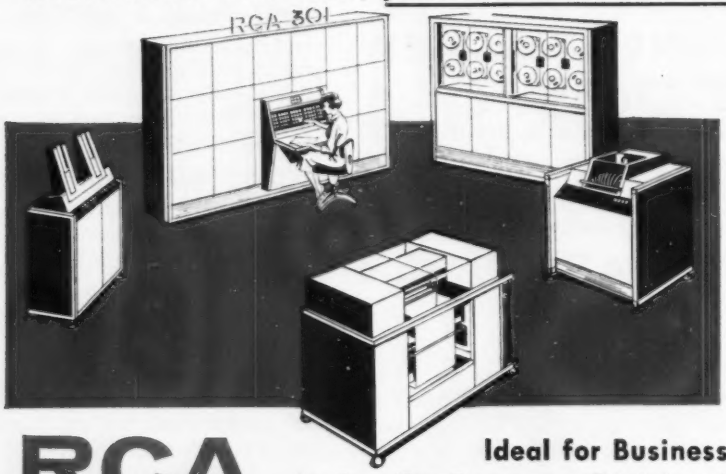

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Products Corp., a drop of $1,200,000.

Jones Mfg. Co. decides to revise its product mix to cope with expected decrease in sales, so that the reduced sales will contain a richer mixture of profitable items. This means switching to products which have a lower level of labor and materials. Fixed costs remain at $2 million. What must their variable cost factor be to earn the same $1 million profits on the reduced sales level of $8 million? Using a variation of an earlier formula:

$$(1 - \text{Variable Cost Percentage of Sales}) = \frac{\text{Profits} + \text{Standby Expenses}}{\text{Sales}} = \frac{\$1 \text{ million} + \$2 \text{ million}}{\$8 \text{ million}}$$

or: 1 — Variable Cost Percentage of Sales = ⅜ and Variable Costs are ⅝ of sales or 62.5%.

Thus, by selecting products with a variable cost of 7.5% less (placing sales emphasis on products to yield this result), the company can continue earning its $1 million profit on the reduced sales volume.

Smith Products Corp. cannot reduce its variable expense as easily. Its variable expense level is $3 million less because it uses more machinery and equipment to produce its products. It must reduce standby expenses. While this is generally harder to do, it is more profitable and healthier for the company. However, to accomplish the same $1 million profit at the reduced sales level would require major surgery. The new fixed expense level required to produce this profit is:

$$\text{Standby Expenses} = \text{Sales} \times (1 - \text{Variable Cost Percentage of Sales}) - \text{Profits}$$
$$= \$8 \text{ million} \times (1 - .4) - \$1 \text{ million} = \$3.8 \text{ million.}$$

This represents a reduction in standby expenses of $1.2 million. This reduction must come from cutting permanent staffing or selling equipment. The latter is generally impractical, so management must attempt to maintain its former sales level of $10 million or more at the sacrifice of its price level. It must accept some "break-even business" to recover the fixed charges on its equipment. While this will not provide the full $1 million profit hoped for, it will prevent disastrous losses that would occur at the lowered sales level.

It's easy to prescribe increased prices to lower the break-even point and boost profits, but this doesn't always work. Mostly, it's the other way around: companies often have to reduce prices to meet competition or changing conditions.

There is a non-linear relationship between a price reduction and the increase in sales it will bring. No one knows to what degree this will happen. Obviously, it's a function of local economy, the buying habits of customers and the degree of local competition. It's also a vital function of the company's economic personality. One thing must be known in advance: if the price reduction accelerates sales, it must provide enough profit to at least absorb the reduction, and continue above that level to justify the risks taken in reducing prices.

The following test determines approximately how much increase in sales

Colight

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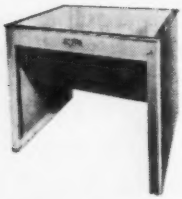

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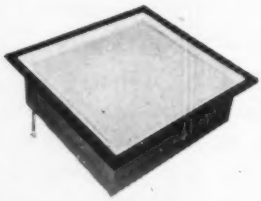

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ASL No. 2, 19"x25" working area.. **$79.50**

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MODEL CSO — The Colight Cabinet Stripping and Opaquing Table combines a large working area with storage facilities. A side tray, adjustable straight edges and feet, and double glass are additional deluxe features. Price: Model CSO, working area, 25" x 27½" **$165.00**

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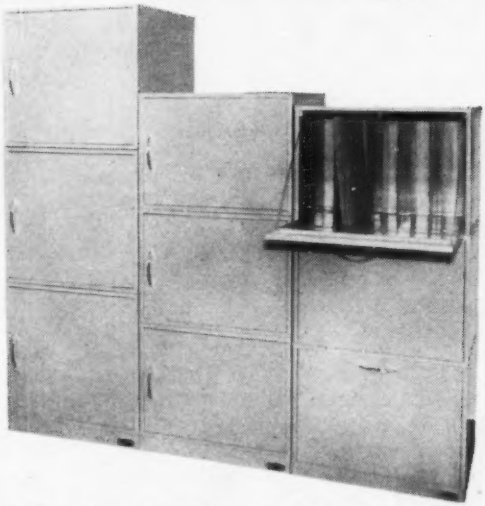

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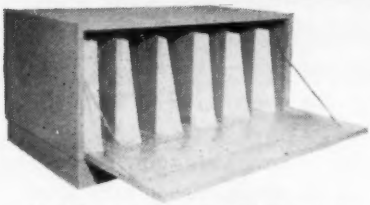

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must be obtained to first offset the reduction in price without disturbing the profit. Browne Mfg. Co. has a sales volume of $1 million per year. Its standby expenses are $300,000 and total variable costs are 60% of sales. The profits are:

$$\text{Profit} = \$1 \text{ million} \times (1 - .60) - \$300{,}000 = \$100{,}000.$$

The company believes that by reducing their prices 10% their sales will increase enough to at least preserve the same profit of $100,000. What *must* this new sales level be to accomplish this? With prices reduced 10%, the total variable costs now become $600,000/$900,000 or .667 and the new sales level must be:

$$\text{New Sales Level} = \frac{\$100{,}000 + \$300{,}000}{(1 - .667)} = \$1.2 \text{ million (a 20\% increase)}.$$

If the company wants to reduce its prices 10% and still earn $100,000 in profit (as it did before the reduction) it must attract $200,000 additional sales. When it reaches this $1.2 million level, it is no better off than it was before as far as profit is concerned and it is sustaining a higher risk in carrying larger inventories to support the added sales. To justify the 10% price reduction, it must *exceed* the $1.2 sales level. If it carries through its planned price reduction but fails to reach the increased sales level, its profits will be:

$$\text{Profits} = \$1 \text{ million} \times (1 - .667) - \$300{,}000 = \$34{,}000 \text{ or } 1/3 \text{ of the original profits.}$$

However, this same price reduction planned by another company of the same size, in the same industry, may have very different effects. Green & Company's sales are also $1 million with a profit of $100,000. Its variable costs are 45% of sales and its standby charges $450,000. There, the sales required to maintain the same profit with a 10% reduction in prices is:

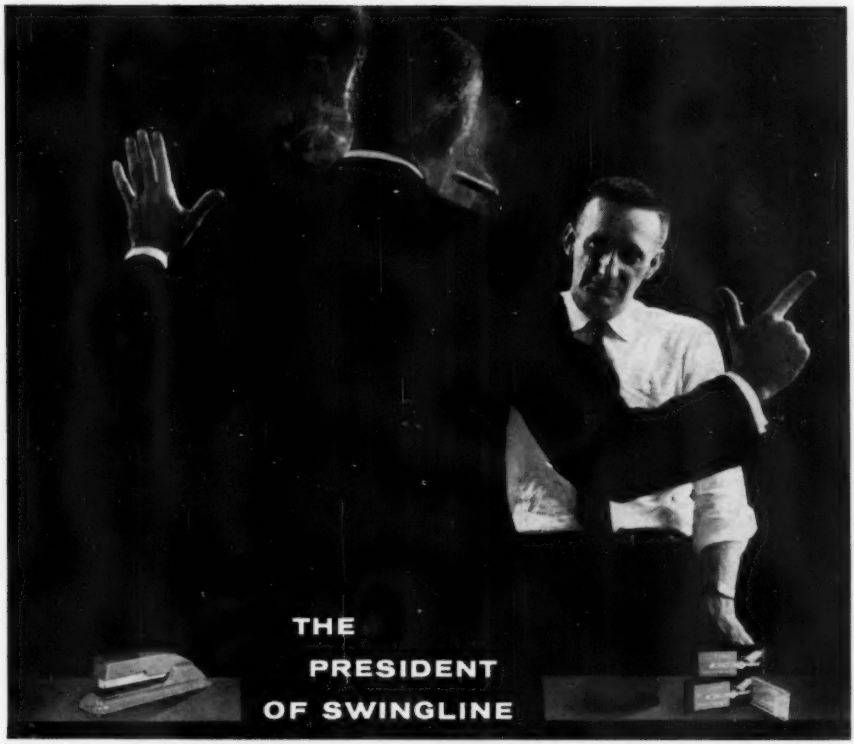
$$\text{New Sales Level} = \frac{\$100{,}000 + \$450{,}000}{(1 - .5)} = \$1{,}100{,}000 \text{ (a 10\% increase)}.$$

If this plant fails to get any increase over the original sales level, the profits will be:

$$\text{Profits} = \$1{,}000{,}000 \times (1 - .5) - \$450{,}000 = \$50{,}000 \text{ or one-half of the original profits.}$$

A rule-of-thumb, in justifying price reduction by increasing sales, is that companies having a high level of variable expenses are most affected by failure to obtain higher sales levels.

Justifying decisions to modernize—to replace existing equipment—is simple in terms of today's volume and market, but what about the future? Basing decisions on present conditions is like building a house without a roof on the assumption that it will never rain. A company wishes to expand its manufacturing facilities by adding equipment. Standby costs are $800,000 and variable cost is 45% of sales. The break-even point is (turn to page 129):



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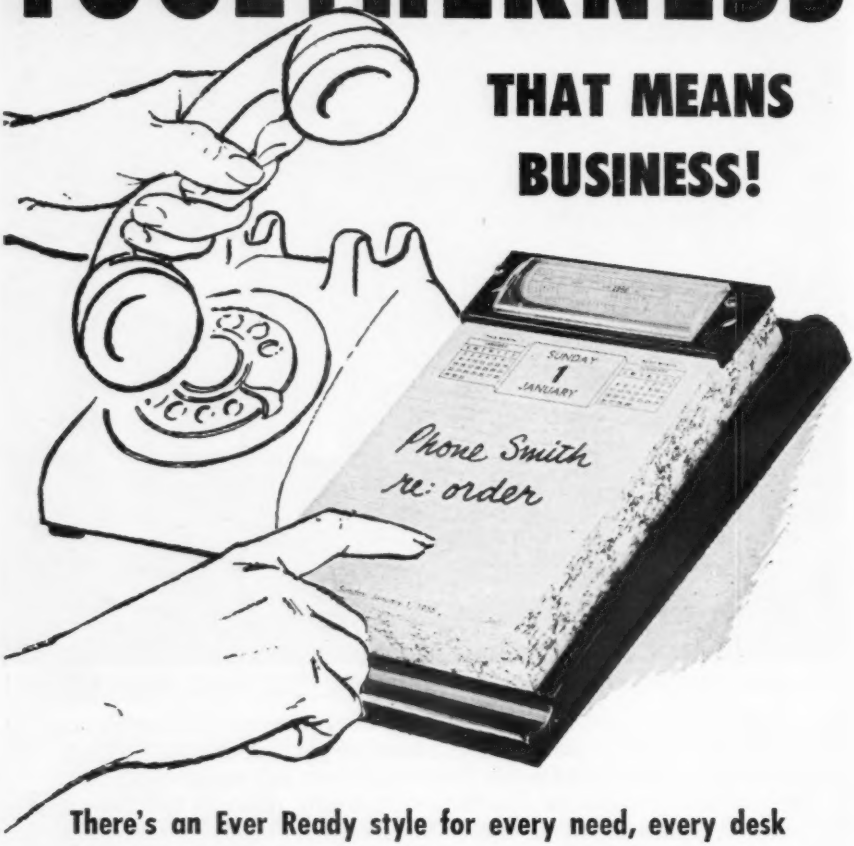

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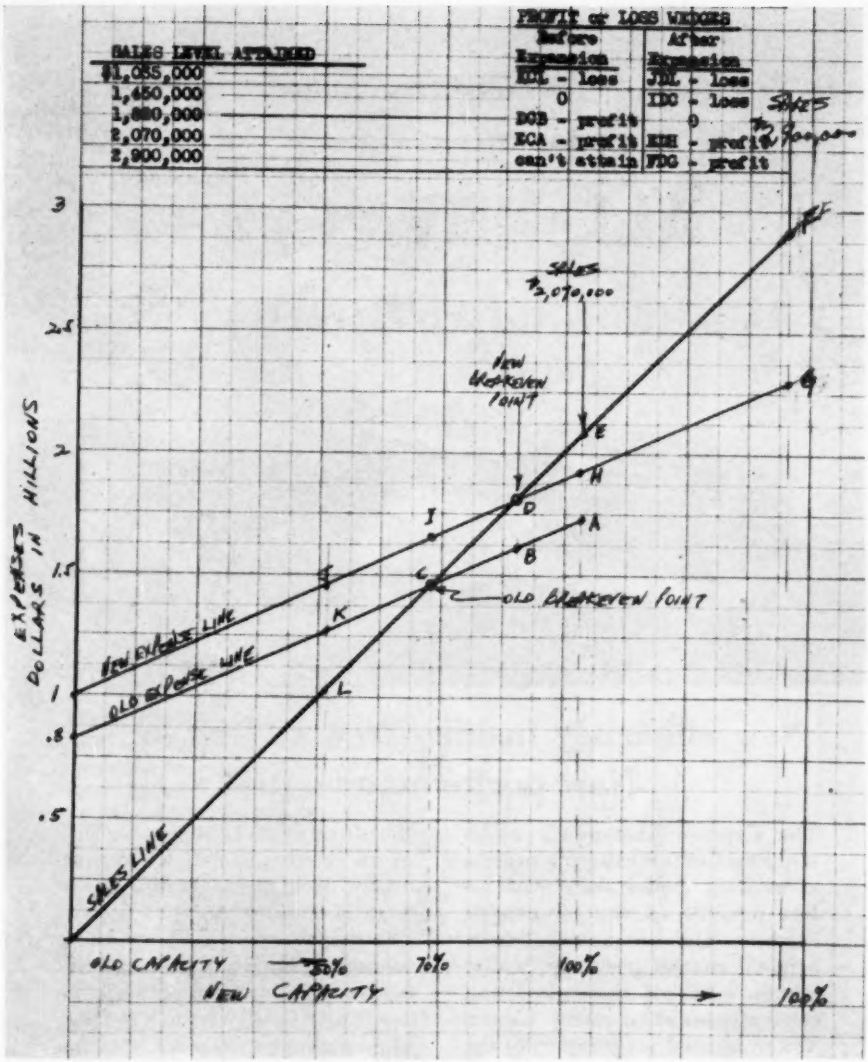

Fig. 7.

$$\text{Break-even Point} = \frac{\$800,000}{(1 - .45)} = \$1,450,000.$$

The company figures its maximum capacity (at a certain product mix) is $2,070,000. This means it reaches its break-even point at $1,450,000/$2,070,000 or 70% of capacity. It wishes to raise plant capacity 40% which would peg its sales-maximum at ap-

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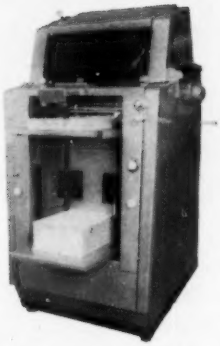

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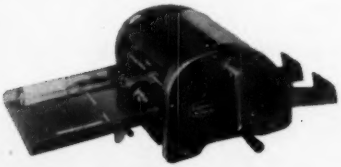

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proximately $2,900,000. Added equipment would produce an increase in fixed expenses. In this case, 40% increase in sales requires an increase of 25% in standby expenses, the variable costs to remain 45% of sales. The enlarged facilities would now raise the company's break-even point to:

$$\text{Break-Even Point} = \frac{1.25\ (\$800{,}000)}{(1 - .45)} =$$

$1,820,000 or an increase of $370,000.

The profit at full capacity before enlargement was:

$$\text{Profit} = \$2{,}070{,}000 \times (1 - .45) - \$800{,}000$$
$$= \$350{,}000 \text{ "before."}$$

To make the same profit with the expanded facilities, sales must equal:

$$\text{New Sales} = \frac{\$350{,}000 + 1.25(\$800{,}000)}{(1 - .45)}$$
$$= \$2{,}460{,}000.$$

There must be an increase in sales of $390,000 to justify the proposed expansion. There is also increased psychological pressure on the company, which might lead to deterioration in managerial judgment, besides increased vulnerability to losses and insolvency. What happens if the company does not get the sales increases they expected after the new facilities are installed, with sales remaining at their former level of $2,070,000? The profits would then be:

$$\$2{,}070{,}000 \times (1 - .45 - 1.25(\$800{,}000)$$
$$= \$138{,}500 \text{ "after."}$$

This is $211,500 less than before the plant was enlarged. A *61% drop in profits* caused by a *16% drop in sales.* Again, not all companies' profits are that sensitive to variations in sales. It

depends on their specific characteristics.

What would happen if sales volume dropped? This could happen in recessionary periods. If this company expanded its standby expenses by overstaffing, the economic emergency is easily met. But how does one "lay off" a piece of equipment? If sales volume dropped below the level which the company had prior to its expansion, and large investments in additional facilities had been made, results could be disastrous. Suppose the volume dropped to $1.6 million, the profit of the expanded plant would be:

$$\$1.6 \text{ million} \times (1 - .45) - 1.25(\$800{,}000) = \$120{,}000 \text{ Loss.}$$

However, if this reduced sales level occurred before the expansion, the profits are:

$$\text{Profits} = \$1.6 \text{ million} \times (1 - .45) - \$800{,}000 = \$80{,}000.$$

At a sales level of $1.6 million, the difference in profitability between the old and expanded company is $200,000. Fig. 7 shows the break-even chart for these calculations.

Some expansions leave the break-even point unchanged and are done for reasons of internal economy and greater profit. In one company, management believes they can count on at least $20 million in sales in the foreseeable future. They are considering a major revision in equipment involving replacement and updating which will boost standby costs $4 million but reduce variable expenses $6 million—a $2 million saving. Fig. 8 shows the before and after break-even data.

Obviously, the company's break-even remains the same and the expenditure is justified if the company is reasonably confident it will get a minimum of $20 million in sales. If it can expect sales above the current level of $30 million due to improving business conditions and/or an increased acceptance for its products, so much the better. However, if sales fall below the break-even point, losses will be experienced with or without major equipment revisions. With the revisions though, losses will be greater as shown by the added loss wedge. If management decided to risk the increased loss vulnerability with this expansion (even though the break-even point would not change), but insisted on doubling its profit as minimum justification for this risk, what sales level would have to be attained?

$$\text{Sales} = \frac{\$8 \text{ million} + \$12 \text{ million}}{(1 - .4)} = \$33.3 \text{ million (or an 11\% increase in sales will produce a 100\% increase in profits } \textit{after expansion}\text{).}$$

This can be extracted directly from the Fig. 8 chart. It might be interesting to find out what increase in profits would be produced by an 11% increase in sales without the expansion. By formula:

$$\text{Profits} = \$33.33 \text{ million} \times (1 - .6) - \$8 \text{ million} = \$5.32 \text{ million, an increase of 32\% in profits.}$$

Expansion, price reductions and changes in product mix are all fine if

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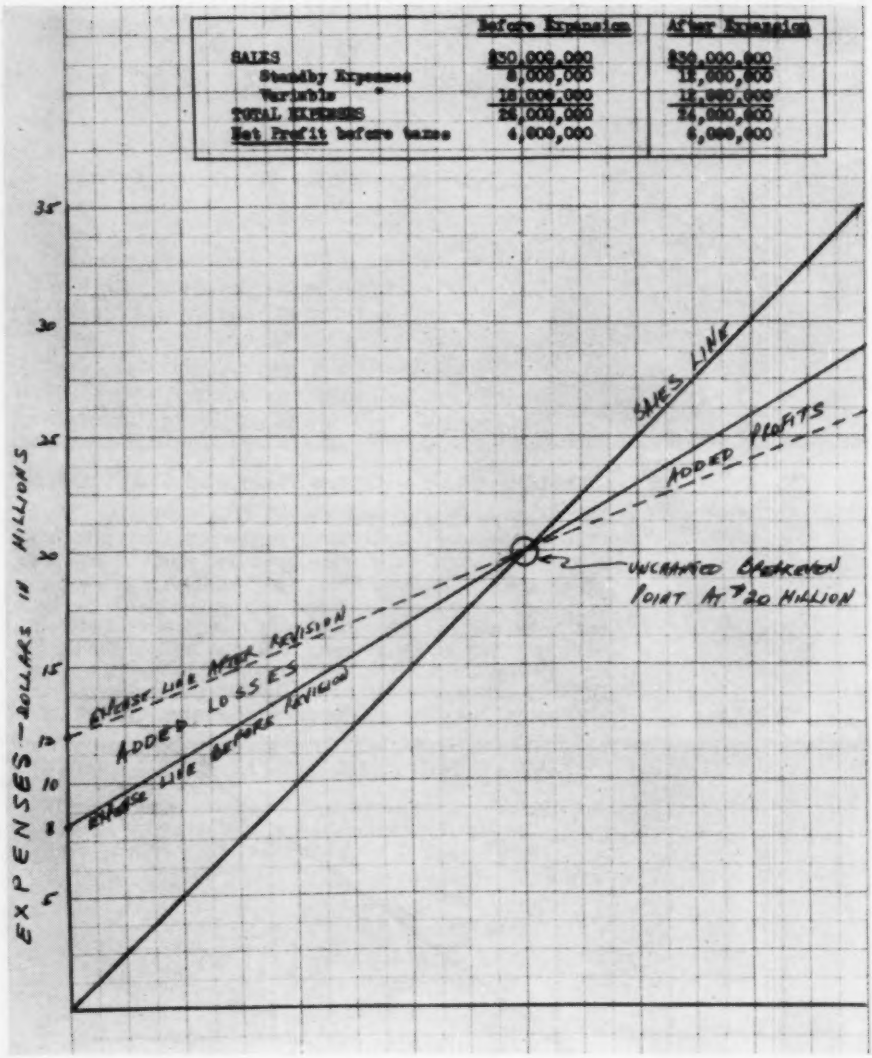

Fig. 8.

they can be economically justified. The company that plunges into one of these serious moves because the idea appeals to the emotions, is taking a chance that could fix a rigid economic pattern for many years to come. By using the foregoing simple charts and formulas, a company can get some idea of its own characteristics and use the information to plot its best course of action.

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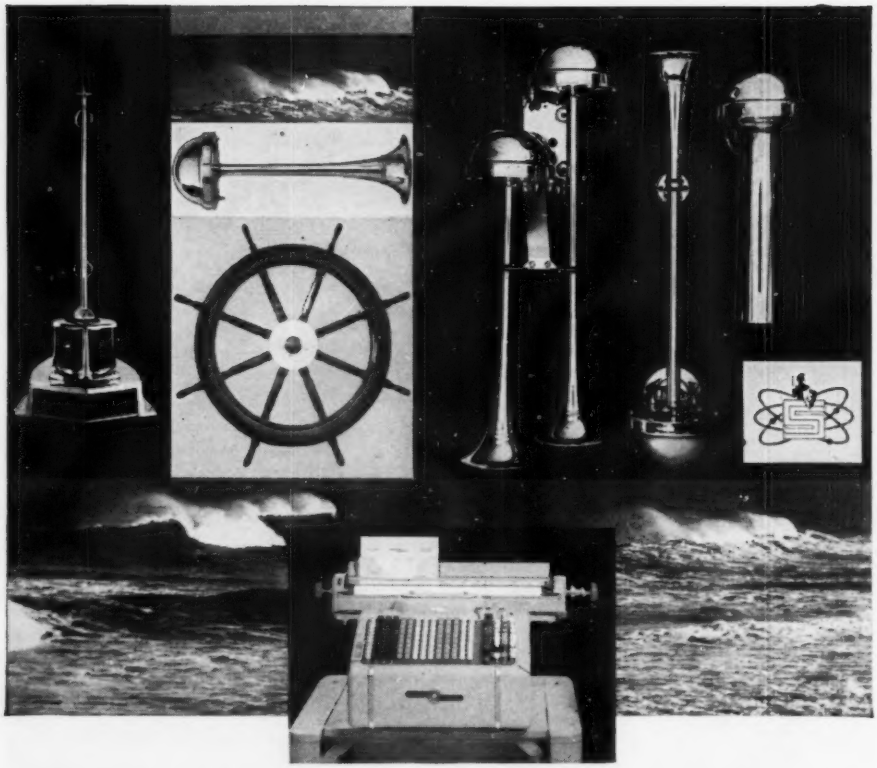

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AUTOMATIC SYSTEMS

Current trends in office automation including data processing.

Punched Tape Extends Billing Data to Marketing Analyses

MARTIN L. SARGENT, Controller, McCloskey Varnish Co., Philadelphia

DATA PROCESSING is of top interest to all methods and procedures men today. When a system also yields important sales information, it becomes of top interest to marketing men. We use it on a so-called bill-and-charge application. The customer is invoiced, our accounts receivable records are posted, the salesman's commission statement is posted, and we accumulate inventory and sales analysis information automatically. All of this is done at the same time.

We use an NRC Class 31 typewriter-bookkeeping machine equipped with a punched paper tape recorder. The accounting machine produces hard-copy records and the tape recorder punches data for later analysis. We must handle invoicing and accounts receivable records for some 3500 retail outlets. We must keep a sales analysis of some 800 items, and the sales records of 30 salesmen who cover the eastern U.S. for us.

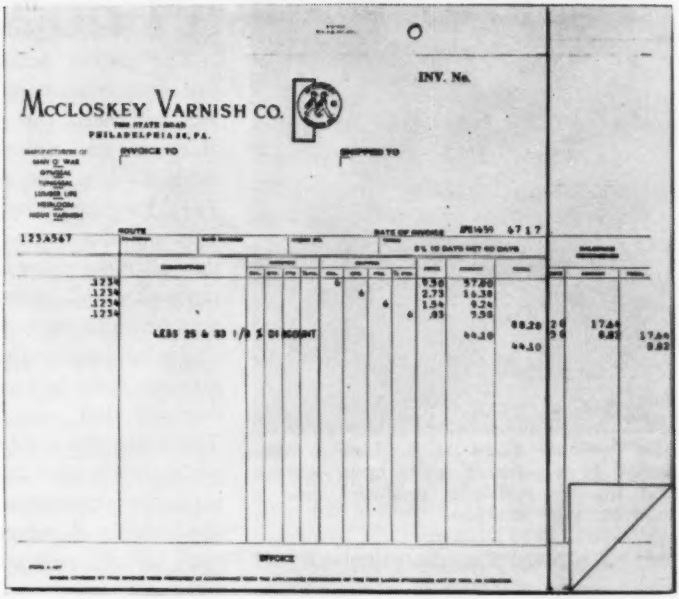
The author looks over final reports created from punched tape.

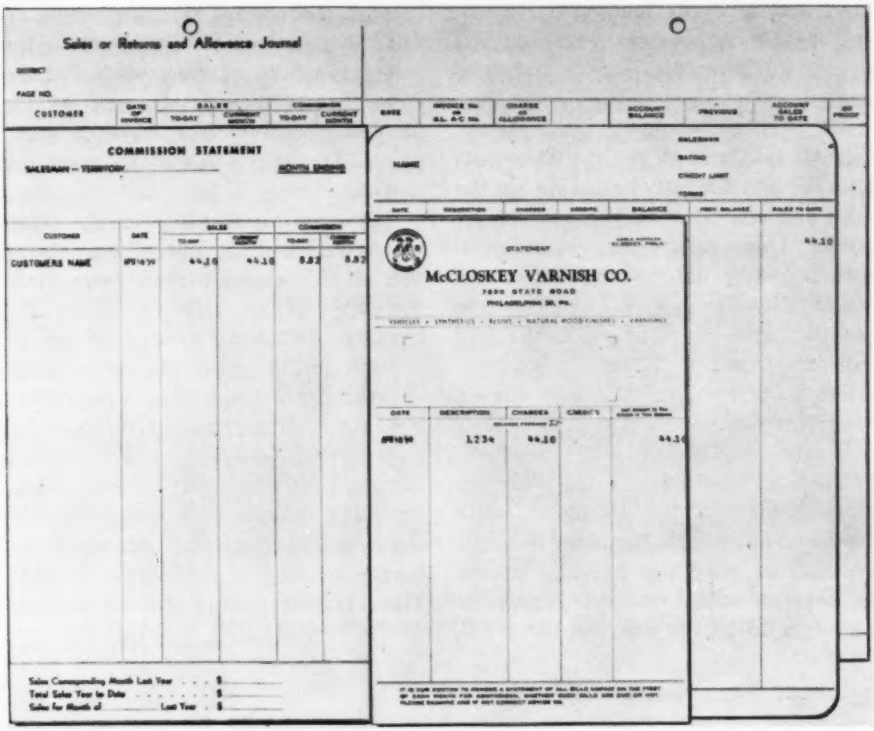
With our previous system, a partial pre-billing was prepared on a five-copy snap-out form, using a standard typewriter. When the form was sent to the factory to be processed, the factory would fill the order and return the shipping copy to the office. The shipping copy was then matched with unfilled orders that we keep in a tub file.

A clerk made extensions on a calculator, then separated the snap-out form. The invoice went to the customer. The salesman got one copy. The accounting copy was analyzed to determine the rate of commission to be paid. Sometimes an invoice was subject to as high as four different commission rates. The shipping copy went to an inventory clerk for recapping, to relieve inventory of merchandise shipped. The sales department received the fifth copy for preparation of sales analysis by territory.

Probably the most serious weakness of this method was that we had separate individuals handling various parts of the job. One person typed invoices;

All related records are created at same time. The seven-digit code at left of invoice identifies customer, salesman and territory. Code is punched into tape to identify all punched cards created later. Zero proof (.00) in right-hand column of journal (below) shows that all old-balance pickups were made correctly. Extensions are all made on same machine.





The National Class 31 machine is connected to a punched paper tape recorder and the automatically produced tape is used for sales analyses.

two other persons used a calculator and bookkeeping machine to post commissions and accounts receivable records; and two more persons recapped the figures for inventory records and sales analysis.

We frequently posted accounts receivable late, and mailed the statements late. We had difficulty balancing out the sales analysis and inventory relief reports. Our salesmen's commission records were not in the shape we wanted them. In short, the whole system was too loose-jointed to give us the control we needed.

We wanted to reduce the re-writing of reports and, at the same time, eliminate other duplication of clerical work. We did not have room in the office for more equipment, but we could easily accommodate a tape recorder. The convenience of being able to mail the tape to a service center was also important. The final advantage was that there was a future possibility of using punched tape on other applications.

The parent accounting machine is just as important as the tape recorder. We still need our hard-copy records. Here is an outline of our present method. A glance at the forms, (page 141), I think will be clearer than words. The significant point to remember is that all these records are created at the same time. All necessary information is punched into the tape automatically.

For example, the seven-digit code number at the left of the invoice identifies customer, salesman and territory. This code along with the invoice number punches into the tape and is automatically duplicated on every line of the invoice, therefore giving identification to all punched cards that are created later.

The accounting machine does all multiplying of extensions. Note in the salesman's copy of the invoice that the rate of commission, as well as the amount of commission on each item, prints. This makes it easy to audit any particular entry.

The zero proof (.00) in the right-hand column of the journal sheet shows that all old-balance pickups were made correctly. If an error is made, the amount of the error prints in the proof column and the entry can be corrected at once. Correct punching is insured by two electrical features of the tape recorder. Parity-check is a self-checking electrical circuit that detects faulty punching. Answer-back is a self-checking electrical circuit that guarantees accurate reading of amounts recorded. These features assure that information

(Continued on page 308)

RPC-9000 Computer System

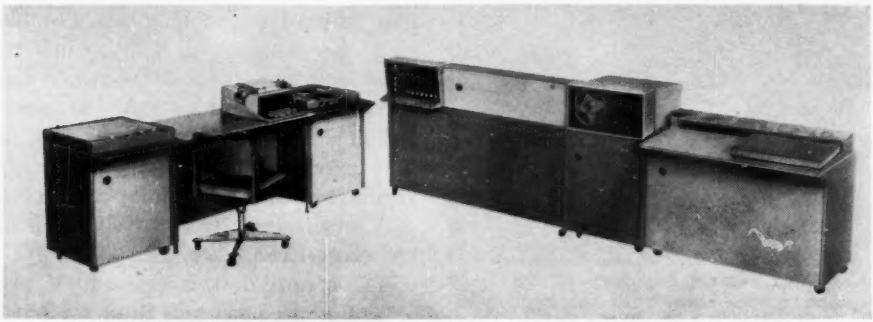
A MODULAR electronic data processing system for the complete range of data processing applications has been introduced by Royal Precision Corp., Port Chester, N.Y. The RPC-9000 computer incorporates advanced computer design features and provides automatic in-line records processing. Data can be accepted in random order, and all affected records are automatically up-dated in a single uninterrupted sequence of operations.

According to Royal McBee Corp., which jointly owns Royal Precision with General Precision Equipment Corp., the RPC-9000 is fully designed to handle the complete range of business data processing needs, such as payroll, inventory control, production control, accounts receivable and payable, sales analysis and forecasting. Information can be entered into the computer from punched paper tape, punched cards or through the typewriter keyboard. The wide range of 43 commands available provides a high degree of programing flexibility.

The basic system includes a central processing and control unit which operates in microseconds, performs the calculations, controls the program and searches the external memory tape; a continuous magnetic tape file for data storage; and an input-output tape typewriter system that reads paper tape at 60 characters per second, and punches tape at the rate of 30 characters per second.

Optional input-output units also available include a 400 cards-per-minute photoelectric reader for input of data contained in 80-column punched cards; a 500 characters-per-second bi-directional photoelectric paper tape reader; a 300 characters-per-second tape perforating unit; a 150 lines (of 120 alpha-numeric characters each) per minute printer; a 666 or 1000 lines (of 120 alpha-numeric characters each) per minute printer; additional tape typewriter systems for on-line or off-line use, and additional paper tape punch/read on-line units.

Internal operating memory consists



A basic RPC-9000 computer system requires only 150 sq. ft. of floorspace.

of nine blocks of magneto-strictive delay lines capable of storing 432 instructions or 72 12-character words of data. This may be expanded to approximately 2000 internally stored instructions, or 328 words. Memory units are compact, simple and easily replaced.

The external data memory is contained on endless loops of magnetic tape. Each tape loop will store up to a million alpha-numerical characters, and 100% of capacity may be used for data or instructions. Separately stored cartridges of tape expand memory capacity indefinitely.

Cross-communications between input units, computer and output units is by separate buffers which speed overall computer operation and allow multiple input, multiple search and multiple output operations. Eight separate records may be searched simultaneously. Up to 30 input and output units may be operated simultaneously on-line.

The basic system requires only 150 sq. ft. of floorspace, with little or no site preparation, no airconditioning, and is operated by ordinary house current. The entire system is protected from power failure by a built-in on-line emergency power supply. The RPC-9000 is available on lease, lease with option to purchase, or purchase. The basic system is $120,000 and it leases for $2450 a month. **For More Information Circle No. 102.**

The Bendix G-20 Data System

THE G-20 electronic data processing system, introduced by Bendix Aviation Corp., Los Angeles 45, is capable of 45,000 floating point operations per second. The system can solve very large scientific and data processing problems at high speed, but with comparatively inexpensive equipment. Because it is all solid-state and highly automatic, operating costs are also quite low.

Simplified control keyboard of the G-20 computer eliminates need for large numbers of switches and lights.

G-20 systems can be assembled in a wide range of sizes, to meet different needs. A large number of subordinates may be used, so the numerous jobs can be done simultaneously. Control buffers, with appropriate accessories, may be located throughout a plant or office building, close to the source of data, or they may be placed in geographically remote locations where they can record data on magnetic tape for shipment to the central processor.

The control desk is less complicated. With the speed at which these machines

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New Recordak Portable microfilmer is easy to carry from desk to desk . . . office to office . . . city to city!
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Send free booklet giving details on new Recordak Portable microfilmer.

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Company_____
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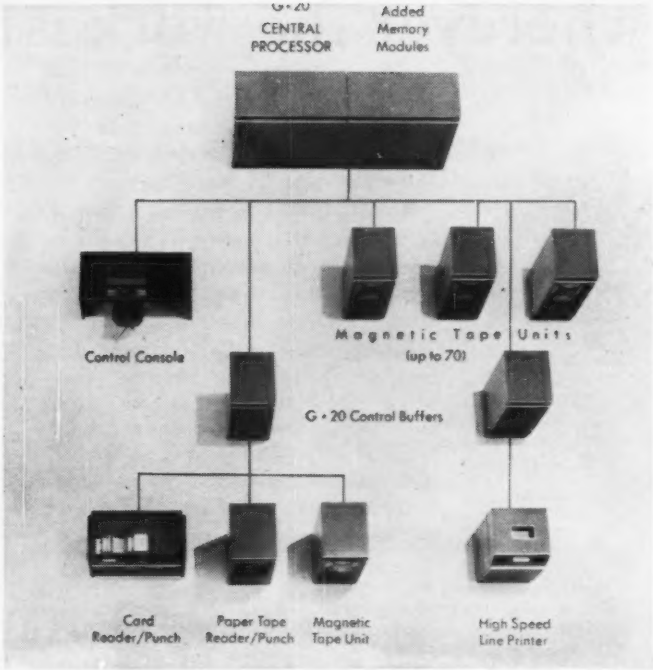
City_____ State_____

For More Information Circle No. 284



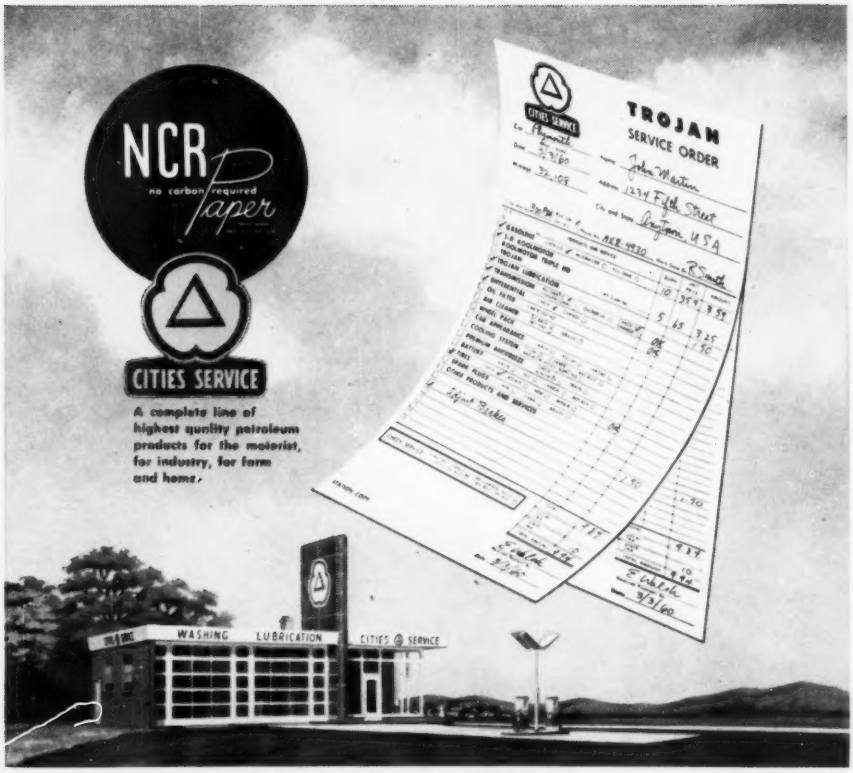
How the Bendix G-20 data processing system can be set up. The central processor's 4096-word core memory may be expanded to a maximum of 32,768 words by addition of "memory modules." Numerous sub-systems can be located remotely from the central processor.

work, a human operator is the weakest link in the chain. Thus, every portion of the new system has been highly automated, eliminating the need for hundreds of lights and switches. The operator's duties consist mostly of loading and unloading paper tape, punched cards and printing paper.

Input-output equipment includes magnetic tape units that read and write at 120,000 digits per second and 600 to 1250 lines-per-minute printers. The fastest punched paper tape and card accessories available also may be used. High speed units developed in the future will be readily accepted by the system which has a maximum input-output rate of 300,000 digits per second.

Physically, the G-20 is small compared to many large-scale data processing systems. Its central processor is only 66″ wide, 60″ high and 28″ deep. It has an expandable random access magnetic core memory which may consist of one to eight modules of 4096 words each. Floating point circuitry is standard equipment.

Production of the new system is now under way and installation of orders on hand will begin late this year. Bendix said manufacturing facilities for its computer division are being increased 70% with a new plant under construction. Production of the low-cost, medium scale G-15 computer will continue, to fulfill the growing demand for smaller units. The G-20 system marks Bendix's initial entry into large-scale data processing. **For More Information Circle No. 101.**



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Chicago, Illinois

"Cities Service Dealers are sold on NCR Paper for a number of reasons. They usually fill out lubrication forms during the busiest time of the day. By using NCR Paper, they do not have to insert and remove carbon paper, and they are getting a sharp, clear copy every time. This saves important time while the customer is waiting, while at the same time automatically addressing a follow-up post card to be sent out at regular intervals to cultivate regular customers.

"All this saves thousands of dollars worth of time every year . . . this faster and better service also assures neater and more accurate records . . . and customers are pleased to receive a legible, non-smeared copy for their records.

"Therefore, while NCR Paper costs more than forms with a carbon, we are convinced that the time saving and other advantages are worth far more than the extra cost, thus making NCR Paper a highly profitable investment.

"As evidence of the popularity of NCR Paper among Cities Service Dealers, they have ordered 1,000,000 sets this year—more than they previously ordered in several years."

Marketing Vice President of Cities Service Oil Company

NCR PAPER ELIMINATES CARBON PAPER

THE NATIONAL CASH REGISTER COMPANY, Dayton 9, Ohio

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76 YEARS OF HELPING BUSINESS SAVE MONEY

For More Information Circle No. 261

BINDER NEWS

Interfiling just couldn't be simpler!

McBEE SWING-HINGE BINDER

YOUR OFFICE PERSONNEL will keep filing current when you change to modern McBee Swing-Hinge binders. They are so simple to use, filing becomes a pleasure. The hinges swing out, unlocking the prongs which open w-i-d-e for easy filing and removing. And this binder lies flat . . . gives you complete visibility of records. Quick shelf reference from large, easy-to-read label holder. New split-prong feature now available for ring binder or specially-punched sheets.

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For More Information Circle No. 287

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For More Information Circle No. 302

Central processor of the Honeywell 400 is at rear left. Girl is operating card reader. Printer is in foreground and four magnetic tape units are at right.

Another New Data System: The Honeywell 400

THE HONEYWELL 400, which was announced last month by the Datamatic Div. of Minneapolis-Honeywell Regulator Co., Newton Highlands, Mass., can perform 6000 additions or subtractions (three address operations) per second. It is compatible with Datamatic's larger Honeywell 800 and can be used in conjunction with the latter, or a growing company can expand its data processing operations from the Honeywell 400 to the 800 with ease and economy. The 400 with its central processor, four high-speed magnetic tape units, high-speed printer and card reader will rent for $8,660 a month and be available the summer of 1961.

The Honeywell 400 is designed for a broad range of business applications. Its performance in the areas of storage and high speed manipulation of large volumes of data make it efficient at sorting and maintaining files.

The Honeywell 400 and 800 use identical tape systems, printers and card readers. Information compatibility of the 400 and 800 tapes also is complete so that information recorded on one system may be read by the other. Programing language can be translated by either a Honeywell 400 or 800, and programs written in this language may be run on either system without modification. As a result, programs written for the 400 may be checked out on the 800 prior to first deliveries of the smaller system.

The core memory capacity of the 400 is 1024 words of 48 bits each. All information passing through the central processor is checked internally as it is read from or written on the magnetic

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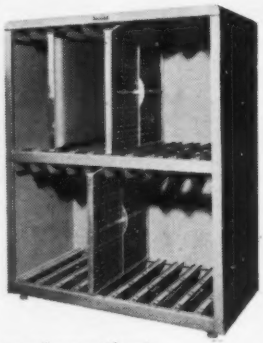

The nylon rollers make board access and storage virtually a one finger operation.

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Model 4071 40" Wide; 22" Deep; 48" High; Shipping Wt. 195 lbs.

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For More Information Circle No. 363

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All aluminum, compact, easy to carry.

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For More Information Circle No. 364

tape. The system is capable of both reading and writing simultaneously. High speed printing can be performed simultaneously with any other operation.

The transfer rate of information to or from the high speed magnetic tapes is 64,000 characters or 96,000 decimal digits per second. Orthotronic Control, a feature on Honeywell data processing systems, automatically detects and corrects any errors in or damage to information recorded on the magnetic tapes. The printer operates at 900 lines per minute, while the card reader handles 650 cards per minute.

The Honeywell 400 electronic data processing system can print out 900 lines a minute with up to 120 characters to a line. It can also make carbon copies.

In addition to the standard system of a central processor, four tape drives, a printer and a card reader, one or two additional tape mechanisms can be added at any time. One standard or high speed card punch can be added as optional equipment. Also optional are multiplication and division, print-storage simultaneous with other operations, paper tape and MICR input. **For More Information Circle No. 110.**

Get Compatible Input-Output

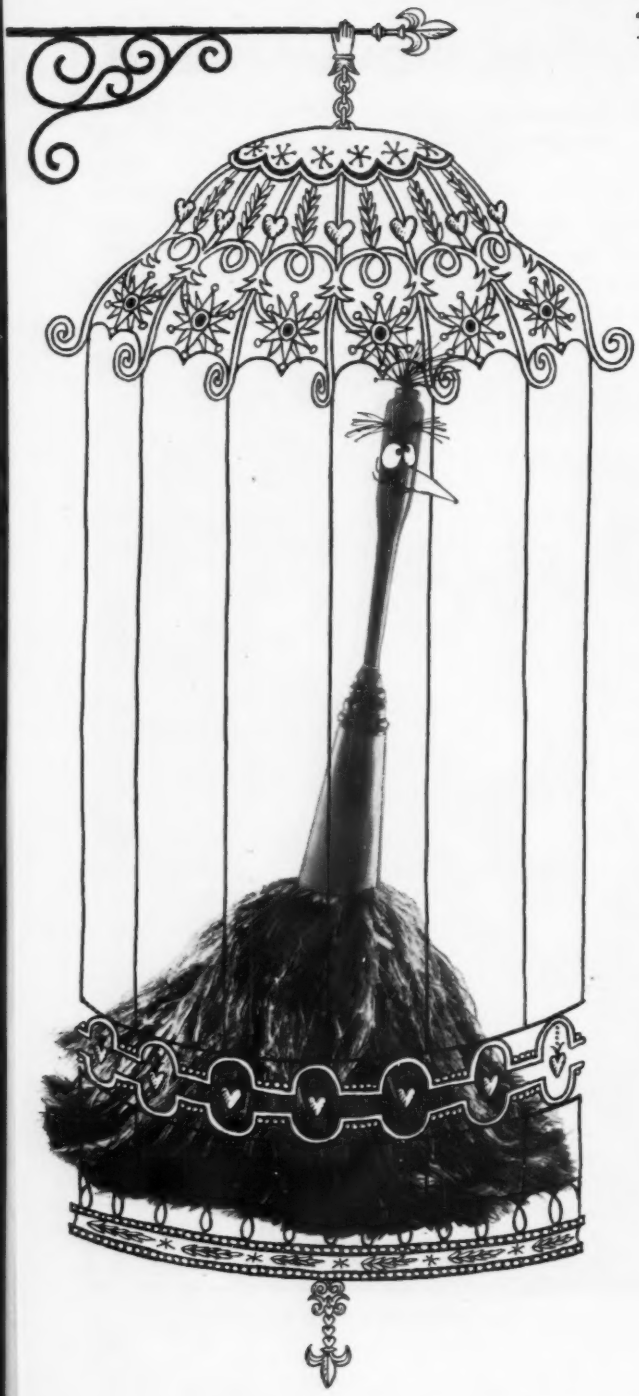
DON BARKLEY, Supervisor, Systems & Procedures Dept., Allegheny Ludlum Steel Corp., Pittsburgh

OUR COMPANY has decentralized the control and management of our manufacturing plants so that all locations are autonomous in having their own completely integrated line and staff functions — with the exception of sales and, in certain cases, purchasing. There are, however, corporation staff advisory departments which exert a dotted-line policy influence over their counterparts at manufacturing locations.

After several false starts into a computer program (caused by several of the mistakes common in so many companies plus the strong feeling by works management that if decentralization is the order of the day we should be considering computerization at the works level) the company ordered an RCA 501. Its first programs cover payrolls for several nearby plants and different statistical and accounting programs for our home office here.

At plant locations we have been mov-

For More Information Circle No. 361



The last of the long-necked

DUST FLICKERS

Say farewell to old fuss-and-feathers—he'll soon be as extinct as the Dodo. For now there's a better way to dust. Cleaner, quicker, healthier.

It's new "SCOTCH" BRAND Dusting Fabric, the duster that *won't* scatter dust around!

This soft, scratch-free fabric catches up dust and holds it in thousands of tiny trap-like pores. Leaves no lint, no oily film.

Thrifty 30 yard roll gives you 60 generous dusters. Ask the boss to order "SCOTCH" BRAND Dusting Fabric today from your "SCOTCH" BRAND Tape supplier. Try it—and you'll never dust the old-fashioned way again!

"SCOTCH" IS A REGISTERED TRADEMARK OF 3M CO.

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...WHERE RESEARCH IS THE KEY TO TOMORROW

For More Information Circle No. 246

ing rather slowly into certain limited and more prosaic installations of automatic data processing, all of which are paying off handsomely because we were sure they would before we took the leap! The lack of gambling instinct on the part of our plant management causes us, as systems men, some pain and we are starting an educational program to stimulate a desire and interest in automation. However, we are proceeding cautiously because over-selling automation is fatal to a well-integrated program devoid of failures and retrenchment demands. In all our installations, working and planned, we insist that input and output media be compatible with currently practical computer requirements (tape or punched cards). When the volume of data being handled by individual functions on electromechanical equipment plus standard tabulating room hardware reaches a peak, we can then profitably transfer such programs onto computers, and use the time and equipment made available to pick up other programs.

We have a well publicized maintenance job cost and schedule control program on a combination accounting machine intercoupler-keypunch hookup, which is a very inexpensive, efficient, effective and comprehensive installation. We are using the same arrangement for an accounts payable and stores record control function. We are preparing to do a combination waybilling and invoicing job with IBM 632 typing-calculating machines. For some time, we have been collaborating with our Electro-Mechanisms Dept. to complete a tandem cold rolling mill installation by which we will not only electronically control critical specification requirements, but will automatically produce complete production reporting data for cost, payroll, scheduling, quality control, and management reporting requirements. This is done by Flexowriter input and Flexowriting-tabulating output. At another plant we have installed a Ramac 305 to do a stores accounting and control program, plus payroll (to be ultimately transferred to the big computer), and other minor jobs.

I agree that many companies are moving too fast, to a large extent on a competitive price basis. We started to make this mistake but have now slowed down to what I feel is a reasonable pace for the long pull. So far, our installations are living up to expectations.

In the past, manufacturers have been prone to say, "Here is something new and exotic and we're sure you must invest in it," but they were unable to propose well-developed programs. Some of them have asked, "What kind of hardware do you need for your own problems?" and have been more willing to collaborate in developing integrated programs in which some of their equipment (and some manufactured by a competitor) might be used. Most management (and systems) men are too busy to run around trying to find suitable problems to put onto specially developed hardware. Surveys point out many of the multidata processing problems encountered by manufacturers. Equipment manufacturers would do themselves and their customers a profitable service if they would come in armed with good predeveloped specific programs. This would simplify and expedite presentations and decisions.

All units in the Bull 300 data system function at 300 operations a minute.

Bull's 300 Synchronized System

THE 300 SERIES data processing system has been announced by Compagnie des Machines Bull of 94 Ave. Gambetta, Paris 20, France. This comprises separate units which may be utilized as required and the system can be expanded at any time. There is a program control unit, card reader and punch, arithmetic unit and a printer. Each unit functions at a speed of 300 operations a minute. This means sensing and punching 300 cards a minute; 300 cycles a minute for addition, subtraction, division or multiplication; and printing 300 80 or 120-digit lines a minute. In addition, a system may include a Bull Gamma electronic computer for high speed calculation and storage of 2000 digits in a high speed memory, 200,000 digits in direct access memory, and unlimited memory with magnetic tapes.

With the exception of the Gamma computer, the 300 Series units are electromechanical, automatically synchronized and phased, with no mechanical links between units. A universal data processing system is easily maintained by adding or replacing units as required. There is no danger that the original installation will become obsolete. Capacity is increased by addition of units. For instance, two printers in a system would allow printing at the rate of 600 lines a minute. More of any other units would similarly increase production. **For More Information Circle No. 104.**

Carousel Memory Unit

The Facit ECM-64 rapid access "carousel" magnetic memory unit is reasonably priced and can be used with any data processing system. It was developed by Facit Electronics AB, Stockholm, Sweden. For More Information Circle No. 158.

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For More Information Circle No. 266

Electronic Billing Machine

AUTOMATION OF BILLING operations and many other office activities is now provided for companies of any size by the 910 automatic sequence controlled computer typewriter introduced by Royal McBee Corp., Port Chester, N.Y. The machine relieves the operator of the routine computation. All figures are properly computed regardless of their position on the form. Yet the machine is as simple to operate as an electric office typewriter.

The equipment automatically types all extensions, sub-totals and totals. A stored program control makes it possible to automatically print description of taxes, discounts and rates, and associated calculations without manual keystrokes. Instructions for the machine can be activated in a predetermined sequence by depressing a single switch. The same switch also can be used to automatically handle variations in standard operations.

Program control for the 910 computer is obtained by an easily replaceable plugboard which permits change of instructions from one job to another in a matter of minutes. This allows the machine to make logical decisions, automatically round off figures to full cents, automatically print leading symbols, and adjust the format in proper position.

The system links a Royal electric typewriter to a computing unit through an encoding-decoding component. The computer, housed in a console by the typewriter, contains four accumulating registers of ten digits capacity each, one multiplier register and one in-out buffer register. The machine is powered by standard 115 volt, 60 cycle AC sells for $6500, and will be available for lease. **For more Information Circle No. 103.**

The Royal McBee 910 automatic sequence controlled computer typewriter automates billing and many other office operations. As simple to operate as an electric typewriter, its stored program control makes it possible to automatically print description of taxes, discounts and rates, and calculations without manual keystrokes. It also automatically types all extensions, sub-totals and totals.

ACCOUNTS DELAY-ABLE?

ACCOUNTS RECEIVABLE behaving like accounts delay-able? An Ozalid order-invoicing system has solved this problem for many corporations. The Ozamatic converts customer's orders into invoices at less than one cent per copy. A complete, low-cost Ozalid order-invoicing system lets you invoice the same day you ship . . . turns all accounts into accounts receive-able. Contact your local Ozalid representative today or write Ozalid, Johnson City, N. Y. A Division of General Aniline & Film Corp.

OZALID

For More Information Circle No. 431

Machine Compiles Directories from Card Files

THE U. S. Navy Bureau of Ships uses the FotoList system for the simplification of its many listings and directory publications because a single source file of information can be made to "spell out" a number of different types of publications. For example, the almost astronomical number of parts that go into the construction of ships can all be contained in one file, regardless of ship model. Each file card contains the information about one part. Cards are code-punched so that if it is necessary to produce a listing by alphabet, by part number, by ship model, or by any other required classification, the cards can be electronically sorted for that classification and then fed to the FotoList machine. The machine organizes the information contained on the individual cards, as a sequential listing in the form of a negative for reproduction. Wasteful duplication of source file information is eliminated together with the costly, time-consuming setting of metal type and maintaining it for each separate publication.

The publication of a telephone directory generally starts with the maintenance of subscribers' names and addresses on file cards which are constantly culled for deletions and changes plus the addition of new listings. At publication time, the list goes to the typesetter who sets the information on the cards on slugs of type for make-up of the individual pages. Proofs go back

The FotoList machine automatically produces a negative ready for plating (right) containing all the material in the galley of metal type (above). This eliminates proofreading of metal type.

All yours in one handsome, compact unit... the economical, new self-powered Telefunken "600" Portable Dictating Machine! Use it anywhere... anytime. Carries its own built-in, lifetime battery... complete with battery recharger. A single microphone button controls every action... dictate, backspace, playback, stop. Lightweight, easy-to-mail magnetic disc can be used over 10,000 times. Precision-built for quality, value and dependability by the world-famous Telefunken Corporation. Test one soon!

TELEFUNKEN

"600" Portable Dictating Machine

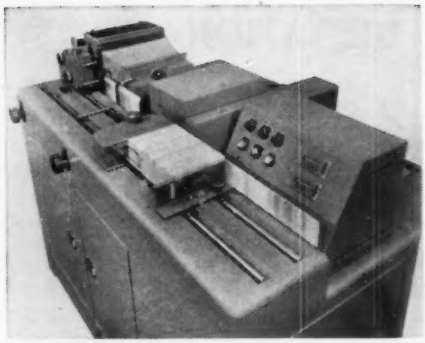
For further information write: INTER-CONTINENTAL TRADING CORPORATION, 90 West St., New York 6, N. Y.

For More Information Circle No. 330

for checking and corrected proofs are re-checked. Final printing is done from the metal type.

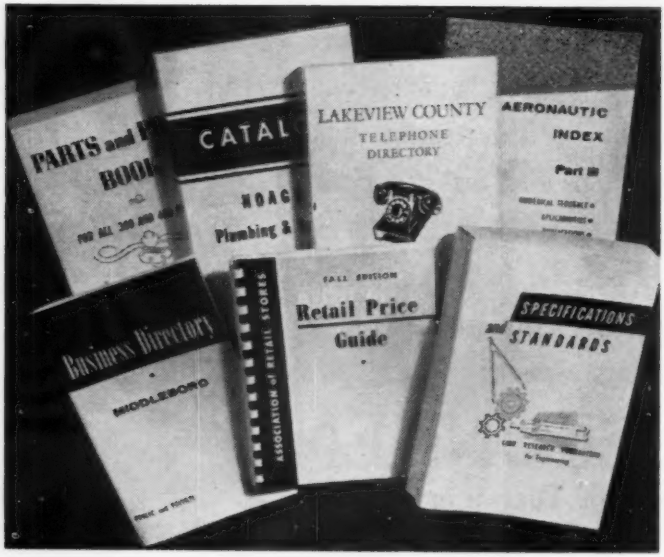
The FotoList machine, developed and produced by VariTyper Corp., Newark, N.J., offers a better method of producing a directory. The same subscribers' card files are maintained with the single exception that the name and address is typed on a VariTyper Line Composer in the exact style of type which will appear in the finished printed edition.

At publication time, the cards are removed from their file drawers and loaded into the feeding mechanism of the FotoList. There they automatically pass at high speed before a camera lens which records the individual lines of information on a negative rolling in synchronization with the moving cards. The end result is a ready-for-plate negative showing the individual lines on the original cards as a perfectly aligned sequential list.

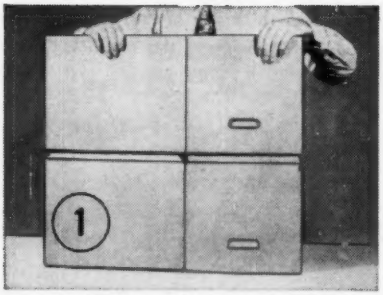


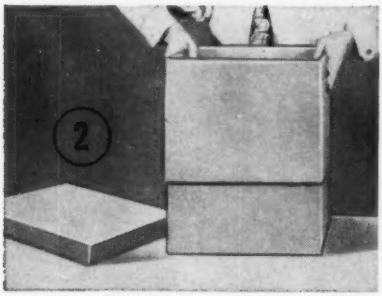
The FotoList camera showing data cards stacked for processing.

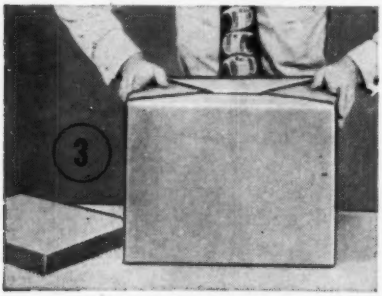
All cards are pre-punched with a hole at each end. During the typing operation pin feed grippers pass through the holes in the cards holding them securely in an exact predetermined position while the card is typed. Thus all cards automatically bear their individual lines of information in the same exact position. The process is repeated during the filming operation with each card held



These are typical of the publications produced by the FotoList system.







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For More Information Circle No. 283

Introducing the ALL NEW
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4 BASIC MODELS

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The LeFebure SELECTRIC FILE brings cards to the operator, instead of having operators chase after the cards. No unnecessary walking, reaching, stooping, pushing and pulling. Production is increased by operators being kept at work stations. No record is more than 1½ seconds away from the operator. To convert, all you do is transfer cards from your present file to removable trays of Selectric File. Will handle all card sizes.

another forward step in office efficiency

LeFebure *Business Systems and Equipment*

LeFebure Corporation, Cedar Rapids, Iowa

An Affiliate of Craig Systems, Inc., Lawrence, Mass.

For More Information Circle No. 308

with pin grippers as it reaches the camera lens. The result is perfect alignment as well as uniform linespacing.

A rough estimate shows that a single drawer file of cards, used in the process, can eliminate a ton of metal type together with its cost of setting and composing. Proofreading is eliminated because the camera does not misspell or make typographical errors.

Other companies are using this system for publishing directories, listings, catalogs, etc. Its success is based on its answer to the question: "If data is recorded for source files, why not type that data in the style of type in which it is ultimately to be printed so that it might become its own ultimate line of type in the final publication?" **For More Information Circle No. 107.**

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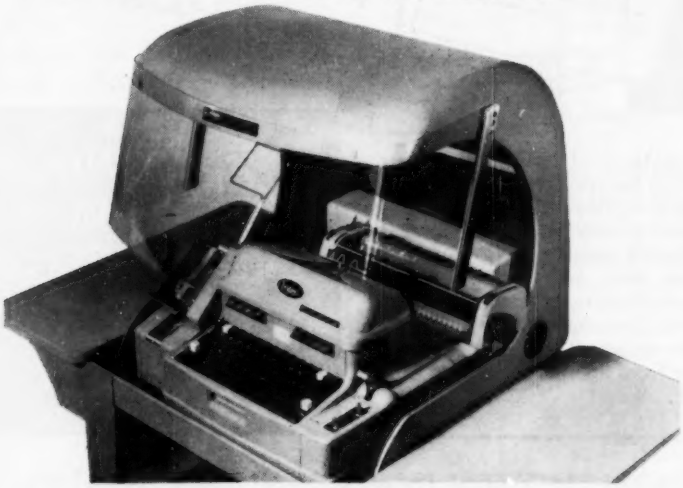

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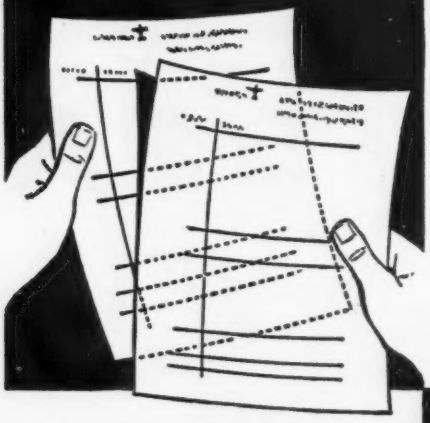

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For More Information Circle No. 258

RIGHT or WRONG in Employee Relations

A ROUND-UP of day-to-day employee problems and how they were handled by management. Each incident is taken from a true-life grievance which went to arbitration. Names of some principals have been changed.

May a Female Employee Use a "Man's" Language?

What Happened:

When the head supervisor came over to Miss X and told her that her work was slipping and that she must improve, the employee exploded. She answered angrily:

"Get off my back. Why are you picking on me?" She also called the supervisor several names of a profane nature and added some unprintable language. For this she was fired. At arbitration the employee defended herself as follows:

1. Miss O'Connor, the supervisor, had no right to fire me. The words I used appear many times in the best seller *Lady Chatterley's Lover*. Therefore it can't be *that* bad.

2. Men use this kind of language all over the place. They don't get fired.

To all this the company replied: "We run a refined office here. We don't want

employees who 'talk rough and vulgar' particularly to supervisors."

Was the Company:
RIGHT ☐ WRONG ☐

WHAT ARBITRATOR LEE EPSTEIN RULED: "Language which may be permissible in a work of literature may not be appropriate in a place of business, especially addressed to a supervisor. In certain types of business establishments mere profanity is not objectionable. For example, this arbitrator has heard cases involving waiters. Both management and labor agreed that in the kitchen, away from the guests, profanity was rife. This was a reaction from the restrained manner forced on waiters in public. Likewise, it is traditional that along the waterfront, in coal mines, in garages, the choice of language is less than elegant.

"But in this case we are concerned with a completely different atmosphere. The witnesses referred to their co-workers as 'the other ladies.' An aura of refinement prevailed. Therefore I find that Miss X was discharged for just cause."

How Long Can You Take to Judge a Worker Incompetent?

What Happened:

Robert Meyer's job and responsibility was to go over the work of other employees. He was on this job for about a year.

In assessing Meyer's work soon after his promotion to his inspection job, the supervisor found many instances of faulty and careless work. He talked to Meyer about the errors. Time went on. Meyer's work did improve a little but not enough to satisfy the company's standards.

After a year, the supervisor decided to demote Meyer to a job he could handle. This also meant a cut in pay. Meyer argued that the company had waited too long to decide on his alleged incompetence. Therefore there must be some other reason.

The company's position was that it wanted to give Meyer all the chance it could to improve his work. A hasty decision might be completely unfair. A year, the company said, is not too long to wait to determine the efficiency and ability of a man in the position Meyer held.

Was the Company:
RIGHT ☐ WRONG ☐

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For More Information Circle No. 245

WHAT ARBITRATOR WHITLEY P. McCOY RULED: "A man may be so unqualified that supervision realizes it almost immediately or within a few weeks. Another man may display some ability and show such promise of improvement that supervision, while not entirely satisfied with his work, may not come to a definite conclusion that he will never acquire competence for a considerable period of time, perhaps a year or two. The demotion of Robert Meyer was not discriminatory, and was based on fair judgment."

Can Employees Refuse Early Morning Overtime?

What Happened:

For many years the company had a practice of asking certain employees to come in a half-hour earlier to get some departments ready for operations. The supervisor never had any trouble in getting enough volunteers. Those who couldn't make it said so—and the supervisor would ask others. The employees got extra money for this half-hour overtime.

Gradually more and more employees began to refuse to "volunteer" for the early hours. Faced with a crisis, management started to *order* the workers to come in early. Most of them complied but Gene Mandek refused. He was given a disciplinary layoff. Gene took his case through the grievance machinery and finally to arbitration.

Gene based his refusal on the grounds that for years the assignment to the early half-hour was voluntary. Therefore the company had set a precedent and couldn't use its authority to make it compulsory now. Management stood on its right to direct the workforce as the basis for its action.

Was Management:
RIGHT ☐ WRONG ☐

WHAT ARBITRATOR HAROLD M. GILDEN RULED: "The company did not relinquish its right to assign overtime work by not requiring it of those employes who did not desire it during the period when there were sufficient volunteers. But the right to require reasonable overtime always existed. Gene Mandek's grievance is denied."

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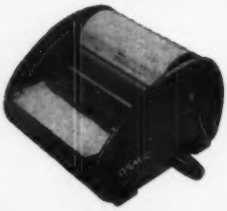

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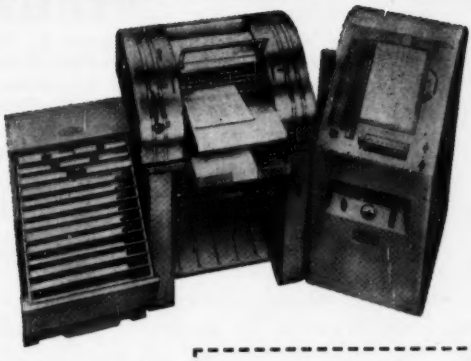

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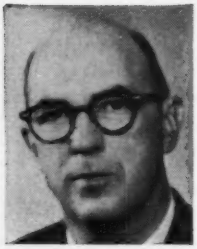

How to Increase Personal Efficiency

The ninth in a series of articles by Harry L. Wylie, Assistant Secretary-Treasurer, Pure Oil Co., Chicago, covering the basic office functions and showing how office methods can be improved—especially in medium size and smaller companies.

MOST EXECUTIVES are fighting (and probably losing) the battle of "time." The demands made upon these men are growing each year. Civic groups want the experience and judgment which businessmen are presumed to have. Charitable groups want the support of business and the organization ability of businessmen. Trade and professional groups recognize the contribution which business has made in their fields. Political groups need men skilled in finance. Church groups need them to handle the temporal aspects of religion. Every organized group at some point calls upon the businessman to contribute his time, effort, finance and skill in furthering its cause.

There is relation between the number of requests for service and the level of active success enjoyed by the persons approached. This is mentioned without criticism, either direct or indirect, because business, through its employee participation, has a responsibility to the communities in which it does business. The publicity seeker who thrills at seeing his name in print or who lends his name as "a member of the committee" (without personal effort or inconvenience) is so much the exception that it bears only mentioning to distinguish him from the dedicated businessman who participates beyond the bounds of good judgment in respect to personal health. The problem remains even though the extracurricular activities are recognized to be worth while. The problem is how to become more efficient in the use of time at the executive level. Analysis, the cornerstone of problem solving, plays a significant part in the following suggestions:

1. *Keep an activity list.* This differs from the appointment calendar in that it summarizes the commitments so that all future activities can be reviewed. The list should show the activity, its type (speaking engagement, act as moderator, attend meeting, write article, read book, etc.), its purpose, amount of preparatory work required, source of commitment, date, place and other pertinent data. This may appear to require considerable time, and appear to be an unnecessary compilation but, upon objective appraisal, it does have the merit of providing a "budget" of time allocation. If one must become selective in his acceptance of obligations, the list of committed and desirable activities (accomplishments) provides a basis for selection.

An insurance executive was forced to become selective in his commitments because of his health. He adopted the activity list and was surprised to find that many invitations to serve came

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from organized groups, all worth while and respected, but which were outside the scope of his interests, personal as well as business. He had been motivated by a desire for additional contacts to increase business and personal prestige. When he was forced to choose only activities which were in his field of business and personal interest and drop fringe activities, there was no loss in business—he actually had more time to devote to his business and, in consequence, his business benefited. No executive can be all things to all people without spreading himself so thin that one or more of his prime obligations suffer, and not the least of these are his family obligations.

2. *Schedule daily time.* This is the corollary to the activity list. Executives who suffer from business pressure are either incapable of saying "no" or have no working plan to meet the demands of work and appointments. Unwillingness to delegate often is the basic cause of pressure. The executive who makes himself available to all callers because he feels that personal contact and supervision are best handled by him, has no one to blame but himself for his tight schedule. One corporate treasurer meets all callers who request an appointment but, after a few minutes of courteous pleasantries, he introduces the caller to one of his associates who carries on the visit in his own office. This builds up the associate and encourages callers to make future contacts with the subordinate in the knowledge that the contact was authorized by the boss. An activity list will indicate whether delegation is carried out to the fullest extent and assist in scheduling time for affairs which must be handled by top management.

Let employees know what you want.

3. *Let employees know what you want.* Keep your secretary informed as to where you can be reached. Personal efficiency includes explicit instructions, adequate reasons for request and reasonably full explanations of objectives. Considerable time can be wasted answering questions which would not have come up if the executive had explained what he wanted when and why.

Many confuse courtesy with explicitness. For example, the executive says to his secretary. "Miss Smith, will you *please* type this report as soon as you can!" This obviously is a courteous request, but as things developed, it did not reflect what he wanted. When the report was not typed by the desired time, the executive was angry and the secretary's feelings were hurt. He had wanted the report to take to a 4 o'clock

meeting and assumed that, "as soon as you can," would be interpreted as "immediately." No employee is ever put in a position of subservience, nor is his intelligence underestimated, when management imposes its will in areas where acceptable choices are possible and personal execution does not impair the end-results. Commands degrade, but requests activate (in business).

4. *Keep informed on office activities.* This requires either a series of personal conferences or an organized system of written reports to management. Personal conferences are time-consuming to both parties. Obviously face-to-face conferences are necessary, but only on a selective basis. Much operating information can be screened, organized and somewhat standardized in periodic written reports. Many companies have adopted the report to management type of communication.

Keep informed on office activities.

Management is usually bombarded with reports, many created by ambitious subordinates who strive to impress with their creative abilities. In the absence of restraint and through lack of direction, these reports often lack coordination or interpretive summaries, forcing upon management the task of reading them and reconciling differences in approach. In companies where management has surveyed reports and expressed its needs in specific terms of control data, much routine information flows upward in periodic and regular management reports, reducing the need of meetings.

Periodic staff meetings are another effective technique for keeping management informed, and for exchanging information by organized two-way communications. By scheduling staff meetings at regular periods most convenient to the work schedule (usually at the beginning or near the end of regular office hours), a considerable number of personal conferences can be avoided.

5. *Follow up assignments.* Many conditions can develop to affect carrying out an assignment and these may call for personal judgment and changes in completion date. Management should require periodic reports of progress on all projects. This can be incorporated in the reports to management, if these are made at sufficiently frequent intervals to allow the opportunity to check progress. If the reports are made quarterly (or semiannually), another type of progress report may be required to indicate progress on long-range projects in terms of weekly or monthly attainment. Here again the written report is substituted on an orderly, organized basis for the frequent personal confer-

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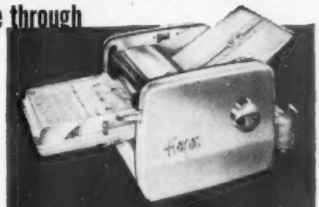

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For More Information Circle No. 468

Consult with employees.

ence type of follow-up.

6. *Consult with employees.* This is another aspect of communication and deals with the generality of consultation rather than the means of communication. Management, through its years of training and practice of self-sufficiency in problem solving, often fails to tap the source of data (and suggestion) which line employees possess. Even though but a few employees are capable of contributing to work improvement, often those few are not given the opportunity to contribute.

Management consultants (professionals) have learned the value of consultation with employees as a timesaver in developing solutions to problems of methodology. Management can save time, and improve its personal efficiency, by consultation with the employees who are doing the work. Consultation of this type should be conducted through the chain-of-command, by and with the knowledge of the immediate supervisor. Ideas are where you find them with no segment of an organization having an exclusive corner.

Consulting with employees is a facet of the broad subject of communications which is the topic of next month's article, "Effective Methods of Communications."

Operation: Boss Opens Mouth, Inserts Foot

A CORPORATION summoned the editors of employee publications in its two dozen branch plants to a "summit" conference in New York. The purpose was to demand more company news, fewer personality pieces in company periodicals. The discussions were well under way and little doubt remained as to management's wishes when the door swung open and in walked the president who said, "I was just passing by and thought I'd drop in to tell you fellows what a fine job you're doing with those little papers of ours. I try to read most of them and I think of them as country weeklies—full of neighborly gossip and interesting stories about our people. You're doing an excellent job!"—*Edwin H. Roper, Bentson Mfg. Co., Aurora, Ill.*

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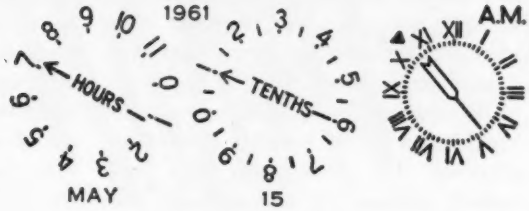

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For More Information Circle No. 309

Mental Illness Spoils Many Of Management's Aims

ROBERT N. McMURRY, Ph.D., President, McMurry Co., Chicago

EVERY BUSINESS has its quota of problem employees. The janitor may be one and so may be the president of the company. The ways in which employees become problems are almost infinite. For the most part, it is because of one of two conditions: (1) he may have been misplaced in a job for which he is not qualified or is temperamentally unsuited; (2) he suffers in some degree from a mental illness.

The individual who can't or won't learn his job is either mentally deficient or, oddly enough, a very brilliant individual who is suffering from a mild case of split personality.

The chronically insubordinate individual has a strong hostility toward all authority. He dislikes his boss and probably dislikes top management. He doesn't like any sort of discipline. He's the so-called rebel without cause.

Then we have the individual who chronically has accidents. Naturally, everyone has some accidents, but certain personality configurations have a larger proportion.

Fourth, we have the hypersuspicious individual who has delusions of persecution and believes the boss "has it in for him."

We have the employee who daydreams excessively, another manifestation of split personality. Another problem individual is the one with chronic financial trouble—the man who lives beyond his means and runs up bills he can't pay.

Then we have the alcoholic, who also belongs within the scope of the psychiatrist. And there is the hypochondriac who enjoys ill health and has his desk full of pills and medicines. While the hypochondriac frequently takes time off, probably his worst offense is that he's a terrible bore when discussing his symptoms.

The psychopathic personality is another problem type. He hates everybody and likes to cause trouble. I worked at one time with an automobile manufacturer where there was a man in the welding department who got kicks out of welding pop bottles into inaccessible places in car bodies. When the car was finished and given its final trial, there would be a rattle which nobody was able to locate. So the car would have to be disassembled. It was difficult to pin anything on a particular welder.

Another client was an auto dealer who sold a high priced car to a customer who drove it away and shortly returned in a towering rage. A piece of spring in the driver's seat broke off and came up through the upholstery. When the seat was taken apart, attached to the offending piece of metal was a note which said (and I have toned it down a bit): "I hope that this will

(Continued on page 288)

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it's **NEW**
—and fast

it's **NEW**
—and dual purpose

it's **NEW**

—and it is available
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Old Town
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IN THE HEAT PROCESS COPYING METHOD

COPY **COSTS** CAN BE **LOWERED**

BY AS MUCH AS **50%** WITH

TOWN-FAC

THE TWO WAY PAPER

OLD TOWN'S **NEW** DUAL PURPOSE COPYING PAPER

Yes it's true . . . you now can lower your per copy costs by almost 50% with TOWN-FAC. . . . Its dual purpose usage: as a carbonless copy paper or as copying paper — will lower costs even more — ask for a demonstration and prove to yourself that high copy costs are a thing of the past.

Old Town

OLD TOWN CORPORATION
Established 1917
750 Pacific Street, Brooklyn 38, N. Y.

For More Information Circle No. 231

"A Sense of Fulfillment"

ONE OF THE FRIENDS of THE OFFICE, in commenting on the reference in the April issue to its 25th anniversary, said: "There is a wonderful sense of fulfillment . . . when something worth while has been accomplished, and you must be very happy at this time." Actually, the really big satisfaction came from the very many good wishes we received from friends everywhere. We thank all most heartily. We publish the following because of their historic interest. The grandfather referred to in Mr. Dick's letter was the founder of America's reproduction industry. Mr. Schulze was one of the founders of the National Office Management Assn.

Reminiscence

Since the April issue of THE OFFICE was your 25th anniversary issue, as well as the 25th anniversary of the appearance of A. B. Dick Company's advertising in your publication, this is certainly a fitting occasion for me to tender my congratulations on the success of your efforts to make THE OFFICE the leading, as well as the longest established, publication in the office field.

Both THE OFFICE and A. B. Dick Co. have come a long way since the days of your first sales calls on my grandfather and father. I feel quite confident in saying that your success in making your publication the effective advertising medium that it is today has been instrumental in helping A. B. Dick Co. build to its present stature in the office equipment field. Our advertising managers through the past few years have apparently shared my sentiments on this subject.

On this occasion of your anniversary, I hope you will accept my sincerest congratulations and best wishes for continued success in the future.—A. B. DICK III, *President, A. B. Dick Co., Chicago.*

Nostalgia

The article on *The Office* of 1888 in the April issue of THE OFFICE is doubly surprising, as well as fascinating, to me. I had no idea that such a publication ever existed. I assume it was published by the same Charles E. Sprague who later became president of a savings bank in New York, published a series of interest tables and lectured at New York University on estate accounting. It is, of course, possible that this is not the same man though his interest in an international language reminds me that, in his later writings, he appeared to be interested in simplified spelling because he used it to a limited extent. You see, I studied under Mr. Sprague about 1908 or 1909.—J. WILLIAM SCHULZE, *Chairman Executive Committee, Bath Iron Works Corp., Bath, Me.*

Walter Emmerling
NOMA President

W. T. Cavanaugh
Executive Director

R. H. Hammer
NOMA Fellowship

John A. Kley
Leffingwell Medal

Annual NOMA Conference In Montreal This Month

NEW DIMENSIONS for office executives will be the central theme of the 41st International Conference and Office Exposition of National Office Management Assn. at the Queen Elizabeth Hotel and the Show Mart in Montreal, May 22-26. In all, 29 management specialists and executives will present continuous sessions covering the five major fields in office management which will be subdivided into the many management responsibility areas of all office executives.

On Monday, May 23, the keynote address will be presented by H. H. Lank, president, DuPont of Canada, Ltd., followed by the annual meeting at 10:30 a.m. That afternoon a special panel will present "The Office of the 60's." On Monday evening, beginning at 8 p.m., registrants may attend any of the following open forums: Supervisory Problems in the Office, Planning for Moving Your Office, New Equipment—Buy or Lease?, Data Processing—Reducing to Practice, Office Cost Control, NOMA Salary Survey, Technical Surveys, Office Building Maintenance, Writing Better Letters and Reports, The Office Executive's Fringe Responsibilities, Operations Research in the Office, Magnetic Ink—An Office Potential.

All day Tuesday, May 24, concurrent sessions will be staged on subjects such as Fewer Records—Better Custody, Employee Orientation, How to Organize and Manage Office Services, Administrative Functions, Work Measurement, How to Select and Train Supervisors, Office Space Economy, Budgeting and Cost Control, Smaller Offices' Systems and Procedures Program, Developing a Systems and Procedures Program in the Larger Office, Administration of Office Remuneration, Service Organizations Can be Your Second Staff, Effect of Computer Installation on Organization and Personnel, Human Factors in the Office Environment, Office Reproduction, Preserving Management Prerogatives in Union Relationships.

On Wednesday, May 25, beginning at 9 a.m., an additional series of concurrent sessions has been scheduled. These will include Unified Industrial Telecommunications, How to Live With

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New Camel ink cartridge* goes miles further without running dry!

Because Venus can put more ink in the remarkable Camel ink-cartridge, you get more work out. For just pennies more, the famous "cross between the pen and pencil"® gives you top efficiency, top economy for the office. Other features: New cone-shaped extended point; light wood barrel; permanent ink. Nine styles. 29c, 39c, 49c. Less by the dozen. Blue, black, red, green ink. Order from your stationer today.

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Venus "365"® . . . the de luxe retractable model. Guaranteed to write 1 year or new refill free. $1.29.

For More Information Circle No. 329

EASE

that makes figurework output soar

■ New highs are reached with greater ease when superbly designed equipment is at your command. The advanced automatic features of Marchant calculators ease figurework production at every step. ■ The Marchant Deci • Magic, illustrated, lets you set all decimal points for both problem and answer by touching one key just once. Then you "write" the problem in the keyboard as you would on paper. Deci • Magic does the rest—with all decimals correct—automatically. ■ On the Marchant Transflo, a unique transfer key "forwards" intermediate answers in a multi-step problem, saves re-entering them in the keyboard. ■ Operating ease like this boosts figurework output, builds savings. This is the reason why . . . modern management counts on Marchant.

GOLDEN ANNIVERSARY 50 1910 · 1960

MARCHANT

Fine calculators and adding machines of advanced design

MARCHANT DIVISION OF SCM **SMITH-CORONA MARCHANT INC.** OAKLAND 8, CALIFORNIA

For More Information Circle No. 230

Your Job, Practical Office Equipment Management, and When Do You Delegate?

The Leffingwell Medal will go to John A. Kley, president, County Trust Co., White Plains, N. Y. The NOMA Fellowship Award will be presented to R. Herman Hammer, president and general manager, Globe-Wernicke Co., Cincinnati.

The exposition, billed as the largest of its kind ever held in Canada, will be previewed on May 23 by conference registrants and guests, and in full scale operation for everyone on May 24, 25 and 26. Over 80 important manufacturers have requested large blocks of space and NOMA may have a problem satisfying all demands with the existing space available. Indications are that in excess of 25,000 interested executives from all over the world will visit the exposition.

According to the general conference and exposition chairman, K. L. MacMillan of du Pont de Nemours of Canada, Ltd., Montreal, the show will be open to the general business public from noon through 10 p.m., May 24-26. Additional information and registration forms are available from NOMA, at 1931 Old York Road, Willow Grove, Pa.

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FIVE FEET OF SHELF SPACE Used By Thousands of Industries, Schools, Libraries, etc. U. S. Govt.

STURDY & DURABLE

Choice selected 1¼" hardwood. Sloping shelves angled for title reading, doweled and bolted to assure durability. Side-riveted swivel casters by Bassick with resilient rubber tires. Rolls smoothly with a full load.

Walnut Finish or Natural Wood Finish

32" long, 13" deep, 31" high. 14" between shelves

$49.50

F.O.B. Factory Stamford, N. Y. Weight 49 Lbs.

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575 Lexington Ave., New York 22, N. Y.

A Subsidiary of The Grolier Society, Inc. Publishers of The Book of Knowledge and Encyclopedia Americana.

ATTENTION

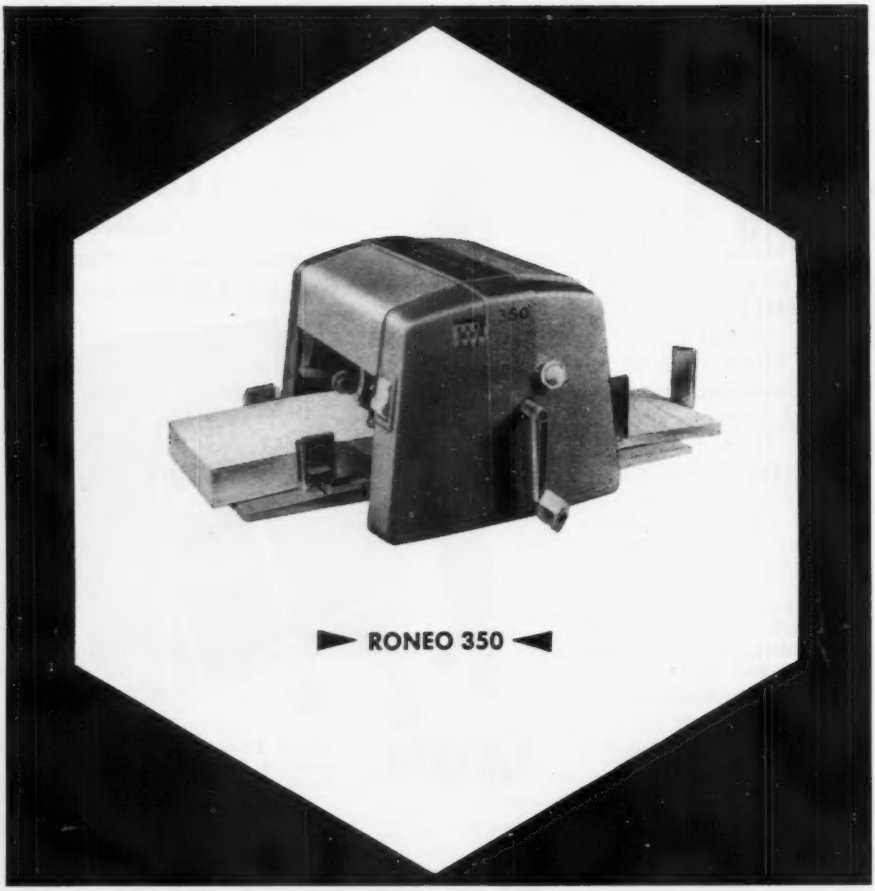
It's here—a mobile office unit—New, Functional.

o o o It rolls o o o

For More Information Circle No. 360

New—Roneo 350, an economy priced, quality electric duplicator at a cost but little more than a manual machine. Will produce printing press quality text and halftones. Completely automatic inking gives up to 26,000 copies per lb. of ink. No waste, first copies are usable. Quick, clean color change. One ream capacity. Compact and self-contained. See your dealer or write: "addo-x inc," 300 Park Ave, New York 22, New York, Pl 5-5420

RONEO



For More Information Circle No. 229

Let People Show

(Continued from page 13)

company. Mentioning people will make our writing more understandable to the people who are our readers.

If we write in a dull fashion, the chances are good that we don't communicate. We waste the time of the people who try to read what we write. No matter what you are writing, include people and draw your audience into your document.

Many times you can use the *you understood*. For example, you can say, "Notify the purchasing department as soon as the goods arrive on the dock." In this case you have said (*you*) *notify*. The word *you* is understood, but not stated. This still gets the person in your procedure. Your reader understands that you're talking directly to him; you're telling him what to do when the goods arrive on the receiving dock.

Every man and woman in the organization has a job classification, or a title. We have managers, clerks, engineers, staff people, truck drivers, and inspectors. Use these titles and you automatically inject people into your writing. If the manager is to do a job, say, "The manager issues the order." Don't say, "The order is issued," unless you mean that some ghostly hand writes and issues it.

The reason for writing anything is to communicate; to get information to people who need this information. Good business writing will admit that people do exist, and do work in your organization.

ELIMINATE DAMPENER RECOVERING FOREVER

with the PERFEX SYSTEM of DISPOSABLE DAMPENERS

for the 221 Davidson - ATF 15

1250W (11x18) - 1250 repellex unit

in one minute you can...

put on a new dampener cover roller with no handling ■ have clean dampeners on your press ■ eliminate handling of dirty covers ■ change dampeners for color changes ■ no special skill required ■ runs in same manner as present roller

ALL THIS AT LESS THAN THE COST OF SENDING OUT YOUR DAMPENERS FOR RECOVERING

send for brochure and name of local dealer **ROLL-O-GRAPHIC CORP.**
133 PRINCE STREET, NEW YORK 12, N. Y.

For More Information Circle No. 434

For

BUSINESS...SCHOOLS...CHURCHES ...ORGANIZATIONS

SPEED-O-PRINT'S

ALL-NEW

Automatic Addresser

$129.50

PLUS FEDERAL EXCISE TAX

Using

LIFETIME METAL PLATES
NON-SMUDGE RIBBON INKING

Wherever there is a need for repetitive writing of addresses, fill-ins and imprints, the all-new Speed-O-Print Automatic Addresser provides a time-saving, error-eliminating solution at exceptionally low cost. Impressions are clear, sharp and always accurate. Mailings are ready hours earlier . . . payroll, inventory or other business forms are prepared in a fraction of the time required for laborious hand methods. Automatic re-winding of ribbon. Factory-equipped for popular "B" Style Frame-Plate, "E" or "CB" Style Frame-Plate machines available upon special order. Low-cost replaceable address plates provide economical revisions. Finished in baked beige and brown enamel with chrome trim. Blends with any office furnishings.

Plates can be skipped or repeated as often as desired, and are always in sequence.

Speed-O-Print **CORPORATION**

1801 W. LARCHMONT AVE. • CHICAGO 13

For More Information Circle No. 334

REWARD

. . . for typewriter dealers interested in increasing their potential . . . profitwise . . . for dealers who learn how easy it is to sell the R. C. Allen VisOmatic Typewriter — the line with the biggest profit offered by any domestic or foreign manufacturer.

R.C.Allen
Business Machines, Inc.

680 FRONT AVENUE, N. W. • GRAND RAPIDS, MICHIGAN

Adding Machines • Bookkeeping Machines • Cash Registers • Typewriters • Safes and Files • Carbon Paper and Ribbons • Precision Aircraft Instruments

913

Please send me information on a protected R. C. Allen franchise.

NAME _____

ADDRESS _____

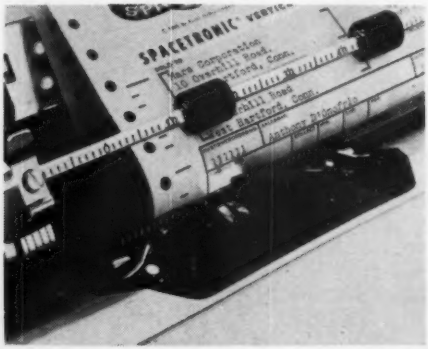
CITY _____ STATE _____

For More Information Circle No. 228

New Products

AUTOMATIC TAB TYPEWRITER

Royal McBee Corp., Westchester Ave., Port Chester, N. Y., introduces the Royal Spacetronic electric typewriter which provides fully automatic horizontal and vertical tabulator control for typing forms and other documents. A photoelectronic sensing device, which responds to ordinary printed lines on a form, provides automatic format control without any programing.



No special ink is required in printing the forms. The machine completely eliminates setting or resetting tab stops, and can be used on a variety of forms with no additional adjustment, since the electronic eye automatically senses the format of a new form and makes the correct stops. The Spacetronic permits greater flexibility in design of forms, because no provision has to be made in preparing the form to reduce the number of tabulator settings required by the typist. It will operate with full efficiency even when there are varying thicknesses within a set of forms, and can be used by any qualified typist with no special training. In operation, the machine is activated by controls which set the carriage in a home position on the form. Control of the typewriter is then an integral function of the form. Photoelectronic sensing readily permits rapid vertical by-passing of any position on the form where no typing is required. In horizontal operation, a tab key causes the typewriter carriage to move to the left until a vertical printed line is sensed. The Spacetronic unit then signals carriage to halt at the precise location where data should be inserted. This can be repeated across the sheet to as many positions as required by form, with no tab setting. The Spacetronic also can be extended in use to automatic insertion of data in complex documents such as insurance policies, mortgages, contracts, lease agreements, promissory notes and sales reports. **For More Information Circle No. 144.**

PHOTOCOPIER

A. B. Dick Co., 5700 West Touhy Ave., Chicago 48, Ill., unveils the economy Model 101 Photocopier at the suggested retail price of $99.50. This compact ma-

chine will make black-on-white copies of letters, invoices, reports and other documents normally handled in the average office. It will copy handwritten pencil, ink

or crayon notations, as well as rubber stamps, date stamps, etc. Copies are permanent and will not fade due to age, heat or light. The machine also features the Multicopy process which provides additional or extra copies when needed. It is recommended for departmental use to supplement current photocopy equipment where there is overload or, in large plants, where too few units are widely scattered. It will copy documents up to 9″ wide and up to legal size length. The frost green and beige photocopier is 19″ wide, 6″ high, 12″ deep; weighs only 12 lbs. Base is aluminum. All rollers are on ball bearings and gears are nylon. Rubber feet protect surfaces. **For More Information Circle No. 151.**

PORTABLE CARD PUNCH

Data Systems Div., American Electronics, Inc., 10 East 40th St., New York 16, N. Y., has developed the pdp/Mek-a-Punch for punching cards without electric power.

The compact and portable machine is available in models to accept either 80-column IBM or 90-column Remington Rand tabulating cards. Simple to operate, requiring no skill or extensive training, it is designed for use where keypunch equipment is unavailable or where the volume of punching does not justify the expense of keypunch machines and skilled operators. It makes possible the direct coding onto cards of information in the field, eliminating dependence upon written or oral reports to transmit data from a remote location to a central data processing office. **For More Information Circle No. 138.**

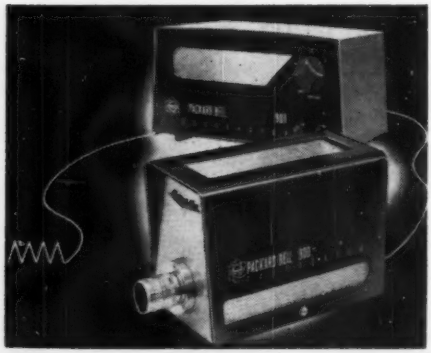
PAPER SHREDDER

Shredmaster Corp., 384 Woodcleft Ave., Freeport, N. Y., announces the Clipper-14 Shredmaster, a safe, table model, all purpose paper shredding machine for the clean destruction of confidential papers and obsolete records. It is ideal for the production of packing material from paper

scrap. This is not a chopper blade type of shredder. Its continuous dual shaft rotating action provides quiet, smooth operation and years of trouble-free service. Maintenance is minimal. Two models are available. Standard model has a 14″ throat, shreds to a 3/16″ width at rate of 275 lbs. per hour. Its 1 hp motor operates on 110-volt, 60 cycle, single phase AC. The Super-Special model also has a 14″ throat but will shred to 1/16″ or wider (in multiples of 1/16″) at rate of 400 lbs. an hour at ¼″ shred. It has a 1½ hp motor for 110-volt, 60 cycle, single phase AC. Both models measure 17½″ high, 25¾″ wide, 22⅜″ deep; weigh 275 lbs. **For More Information Circle No. 123.**

CC TELEVISION CAMERA

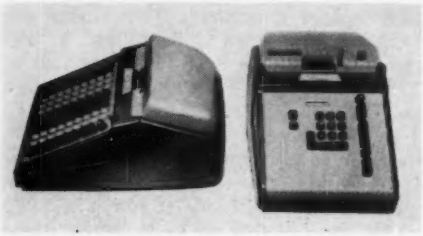
Packard Bell Electronics, Industrial Products Dept., 1920 S. Figueroa St., Los Angeles 7, Calif., announces a low-cost, completely transistorized camera unit for closed-circuit telecasting. It provides better than broadcast quality transmission and highest mechanical dependability. The



Packard Bell TeleKaster camera with desk control unit and 25-ft. cable sells for $695, plus nominal installation fee. It can be used with a regular TV receiver or monitor. A complete CCTV installation, with monitor, can be purchased for less than $1000. **For More Information Circle No. 197.**

ADDING MACHINES

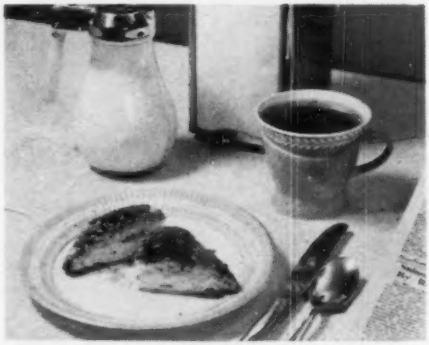
Victor Adding Machine Co., 3900 N. Rockwell St., Chicago 18, Ill., unveils the two-tone brown Premier Adding Machine, designed to provide quiet, smooth, effortless operator efficiency. Both ten-key and



full keyboard models have been so engineered that every functional control is within reach without removing fingers from numerical keys. Three separate motor bars eliminate nonessential hand movements. Located in a vertical row, the length and position of each bar has been carefully determined according to its functions. Longest bar is for adding and totaling, shortest bar provides subtraction, third bar can be used for both addition and subtotaling. This vertical bar arrangement is said to facilitate use of finger touch system on even full keyboard models. Ten-key Premiers also have a larger, L-shaped cypher bar for easier thumb control, and an electrified correction button which erases at the touch of a finger. Available for both hand and electric operation, Premiers come with 8, 9, 10 or 11 digit listing capacity, and up to 11 totaling capacity. Prices range from $215 to $335 (plus tax). **For More Information Circle No. 318.**

PAPER SERVICE CUP

Lily-Tulip Cup Corp., 122 East 42nd St., New York 17, N. Y., makes the plastic coated paper China-Cote Service Cup and holder for lunchrooms and cafeterias. Presented in a combination of gold and white, the service adapts itself equally to



hot beverages such as coffee, tea, or hot chocolate, as well as soups, fruit or seafood cocktails, puddings, soft boiled eggs and other servings. The hand-fitting, well balanced holder is formed of cycolac to insure rugged usage without scratching or breaking. The China-Cote cup has a 7 fl. oz. capacity and a rounded reinforced bottom for perfect stirring. It fits snugly

into the holder and is easily disposable after use. A companion for the cup is the 7¼" China-Cote plate in the matching design. These plates are a saving when service is for a sandwich or dessert, reduce clatter to a minimum, are light and easy to carry, and allow the food service operator to advantageously display food. **For More Information Circle No. 113.**

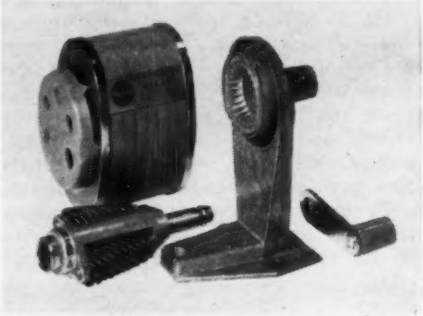
STORAGE FILE

Paige Co., 114 East 32nd St., New York 17, N.Y., offers the Paige Miracle File that pops open for immediate use and folds flat for space-saving storage and reuse. Designed to be stored on quickly erected shelving or stacked one on another to utilize floor-to-ceiling space with easy record accessibility. Made from heavy corrugated board which forms a box within a box with true eight-corner, double-wall, double-floor construction.

This provides great rigidity and stacking strength. Miracle Files can support the weight of an average man on their covers. Comfortable hand holds make them easy to lift and move even when full, since they securely hold all that a clerk can safely carry. The one size is used for both letter and legal size papers: the former fit across the short dimension and the latter are filed the long way of the files. Miracle Files are ideal for storing and transporting all records and artwork, photos, literature, samples, merchandise, office supplies, etc. A larger size Miracle File is made for larger and bulkier materials such as ledgers, salesmen's equipment, etc. Users have reported 75% savings in equipment costs and 300% savings in space with Miracle Files. For descriptive literature, **Circle No. 162.**

PENCIL SHARPENER

Apsco Products, Inc., Dept. 27-5, Box 840, Beverly Hills, Calif., has designed and field-tested a new center-cored Zamak 5 cast base for its pencil sharpeners. It survived the roughest treatment in actual usage tests. Additional sharpener features such as integral head gears, stream styling



and an intelligent hole pattern for mounting simplified base manufacture and made it possible to make this base standard on all Apsco economy model sharpeners as well as on more expensive models, at no increase in price. A steel locking ring, staked to the head at six strong points, holds receptacle firmly, resisting the loosening action caused by vibration during use. The heavy-duty base is offered with a lifetime guarantee. The internal gear is cast as an integral part of the base, and has longer gear teeth which allow the pinion gear teeth of the cutter head to be completely enveloped by the internal gear teeth, permitting greater mesh area and subsequently less gear wear. **For More Information Circle No. 155.**

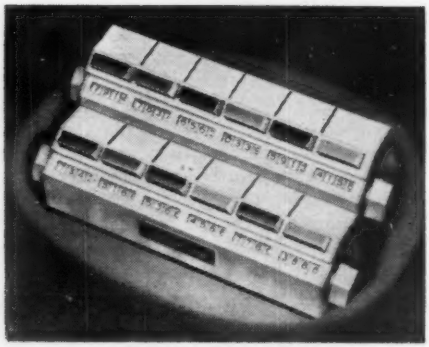
COPYING MACHINE PAPER

Minnesota Mining & Mfg. Co., Dept. SO-132, 900 Bush Ave., St. Paul 6, Minn., announces type 433 heavy white copy paper for use on any Thermo-Fax copying machine. This bondlike paper is designed for prestige and executive copying

applications, or where a more durable, white copy paper is needed. Price is only slightly higher than regular Thermo-Fax paper. This brings to over 12 the number of specially designed or colored papers available for use with Thermo-Fax copying machines. Type 433 is available in 8½" x 11", 8" x 10½" and 8½" x 14" standard sizes, with special sizes to order. **For More Information Circle No. 169.**

SUBTRACTING COUNTER

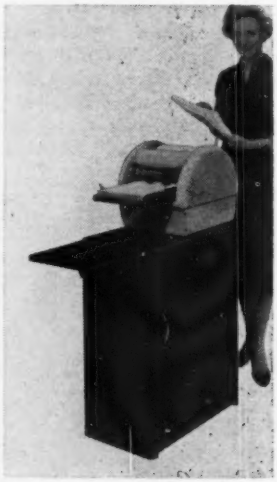
Denominator Co., 261 Broadway, New York 7, N.Y., introduces its Subtracting and Reducing Balance Counter. Now there are two ways of handling deductions from inventory. You can add up the number of items sold from hundreds of orders received by style, color, size or catalog designation. Upon completion of tabulation you merely deduct the total sales units recorded on each Denominator counter from the available balance figures on the related running inventory records



to obtain the new figure for stock on hand —or, if it is more important that you know instantly the residual balance available, you can now use the Subtracting Counter. On this you first preset the available balances in the dials of each counter. Then, tally sales as before by use of counters designated for each type of item sold. You immediately see on the recording dials the remaining quantity still available. This new feature will have application wherever it is essential to have instant information about available balances and will result in time saving over the add and subtract method. Further benefit is obtained in the ease with which counters can be preset to record subsequent additions to stock as well as entry of the starting quantity. **For More Information Circle No. 165.**

SPIRIT DUPLICATOR

Ditto, Inc., 6854 McCormick Road, Chicago 45, Ill., announces the Model D-21 electric spirit duplicator which will reproduce 120 clean-cut copies a minute of anything typed, written, drawn or traced. Priced at only $299, the machine can deliver 300 to 500 sharp copies in one to



five colors from a single master on any weight paper—16 lb. to card stock from 3" x 5" to 9" x 14". The easy-to-use D-21 comes equipped with the Ditto Sure-Feed system which features an all-new feed pressure lever, paper separators, side guides and a lift lever for fast paper insertion. The feed pressure lever and paper separators permit single sheet feeding of any weight paper or special stock, punched or round corners. The Sure-Feed system stops skipping even if the paper size varies as much as 1/16". Ditto Magic Copy Control assures copies of even intensity throughout the run. Copies come out dry with printed-side-up, so each sheet is ready to use. Other features include electric,

push-button control; positive master lock-in; slotted drum for quick attachment of blockout magnets; reversible feed tray and an accurate automatic paper counter. A functionally designed cabinet-stand that provides storage for supplies is an optional extra. Moderately priced, it occupies a minimum area and its roomy top surface offer office operators plenty of space to work. **For More Information Circle No. 119.**

COPYING MACHINE

Royal McBee Corp., Westchester Ave., Port Chester, N. Y., announces the Royfax Office-Copier which will reproduce from any type of original regardless of color, such as pen or pencil copy, blueprints and hectograph copies. This equipment reproduces by the light diffusion process at up to 100 or more copies an hour from as many different originals.

The Royfax Office-Copier is priced in the same range as the average manual office typewriter, approximately $220, and can be operated by any office employee to reproduce records at only a few pennies for each document. A complete line of operating accessories, as well as the necessary Royfax reproduction papers, were introduced at the same time. **For More Information Circle No. 143.**

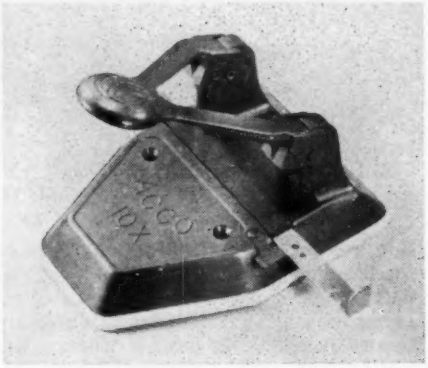
FILING CABINET

Hoosier Desk Co., Jasper, Ind., makes the FF224 Filing Cabinet, one of its Flexeze office series, a completely modular grouping comprising units making over 500 combinations to fit any size space. The FF224 is 24″ wide, 26″ deep and 29″ high. Made of standard walnut, this cabinet has two file drawers that operate on full extension glides, grooved for either letter

or legal size hanging file folders. For literature describing this and other Flexeze units, **Circle No. 120.**

PAPER PUNCH

Acco Products, Div. of Narser Corp., Ogdensburg, N. Y., announces that a gauge that locks in place, and a removable tray, are features of the improved



Acco 10X two-hole punch which makes two ¼″ holes, 2¾″ center to center. The spring steel gauge lock assures precise alignment of papers to be punched. The gauge is adjustable for all standard paper sizes, and works easily. Once locked,

holes are punched in exactly the same position each time. The broad, flat plastic tray at the base catches chad from many thousands of sheets and is easily removed for emptying. It also protects desk tops from skid marks and scratches and provides a steady, firm foundation when punching. Made of smooth, die-cast metal with hard steel cutters, the Acco 10X punch is available in gray, frost green or tan. It replaces Acco punch models 110 and 10, retails at about $4.75. **For More Information Circle No. 199.**

DICTATING MACHINE

Warren Weiss Associates, 346 West 44th St., New York 36, N. Y., announces the Uher Universal dictating-transcribing tape recorder which, with optional Akustomat, starts and stops at the sound of the dictator's voice. Otherwise, the four most used controls are at the fingertips: record,

stop, rewind, playback. Machine has three speeds: 3 4/4, 1 7/8 and 15/16 ips. At latter speed, it provides eight hours of recording on a 5″ reel of tape. There are two volume controls, one for dictation and one for transcription. Counter can be preset and reset; allows finding any place on the reel in seconds. Machine records with microphone laying flat and automatic modulation control allows its use for conferences or taking inventory by persons anywhere within 50 ft. Automatic stop prevents tape runoff. If the fast forward, record, or playback buttons are pressed while tape is rewinding, machine stops and starts again as directed without breaking tape. Tape can be reused indefinitely and dictation corrected as required to make it errorfree. Remote transcription controls include choice of Unda-Typewriter pushbuttons or foot control; dynamic or crystal earphones or stethoclips. The Uher Universal weighs 17 lbs., measures 12 3/16″ x 9⅝″ x 5 5/16″, operates on 110, 125, 160, 220 and 240-volt AC or in a car with optional inverter. It has other features such as synchronization for slide projector, continuous playback, five inputs, transistor mixer, etc., offers high fidelity music recording and playback, and numerous accessories. Complete with remote control microphone carry case, reel and dust cover, it costs $299.95 plus tax. **For More Information Circle No. 115.**

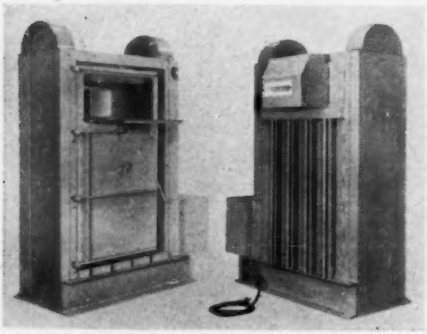
MACHINE LAMP

Fostoria Corp., Dept. 38, Fostoria, Ohio, makes an attractive, low-cost, cool-operating Localite for office machines and other working areas. Known as the R Line, it has a 12″, 15″ or 18″ flexible arm for

maximum adjustability and a circular reflector ventilated for cool operation. Its attractiveness makes it ideal for office, home or laboratory use. It takes a standard A-19 60-watt incandescent bulb. **For More Information Circle No. 352.**

PAPER SHREDDERS-BALERS

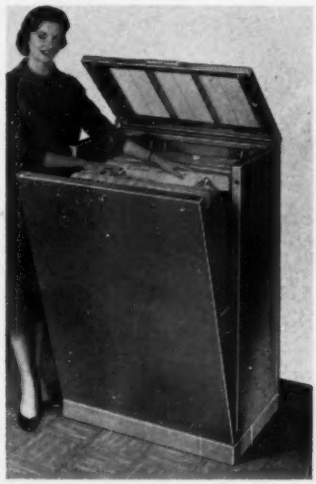
Baler Corp., 4039 Walden Ave., Lancaster, N. Y., introduces two combination shredding and baling machines. Model DSSB-2810 has bale size 28" x 17" up to 34". Bale weight up to 200 lbs. Baler operates from ½ hp. special gear motor, 110 volt, 60 cycle, single phase. Loading door opening for baler, 24" x 13". Capacity per hour for baling only is approximately 500 lbs. Total overall pressure is 8000 lbs. The shredder feed opening is 9¾", shreds ⅛" wide, takes up to eight thicknesses of newspaper per feeding, up to 100 lbs. per hour, powered by 1/3 hp, 110 volt, single phase 60 cycle motor. Paper clips and fasteners do not damage shredder unit which has reversing motor which will free material if jamming occurs. Overall unit size 54" x 68"; shipping weight completely assembled and ready to operate, 1050 lbs. Price f.o.b. above is $1595.



Model DSSB-2812 has bale size 28" x 17" x up to 34". Bale weight up to 200 lbs. Baler operates from ½ hp. motor, 220 volt, 60 cycle, three-phase. Loading door opening for baler 24" x 13". Capacity per hour for baling only is approximately 500 lbs. Total overall pressure is 8000 lbs. Shredder feed opening is 11¾". Shreds 3/16" wide. Takes up to 16 thicknesses of newspaper or 12 thicknesses of blueprint paper per feeding. Shreds up to 300 lbs. per hour, powered by 1 hp. 220 volt, three-phase, 60 cycle motor. Paper clips and fasteners do not damage shredder unit. Reversible motor will free material if jamming occurs. Overall unit size 54" x 30" x 68". Shipping weight completely assembled and ready to operate 1100 lbs. Price f.o.b. above is $1895. **For More Information Circle No. 142.**

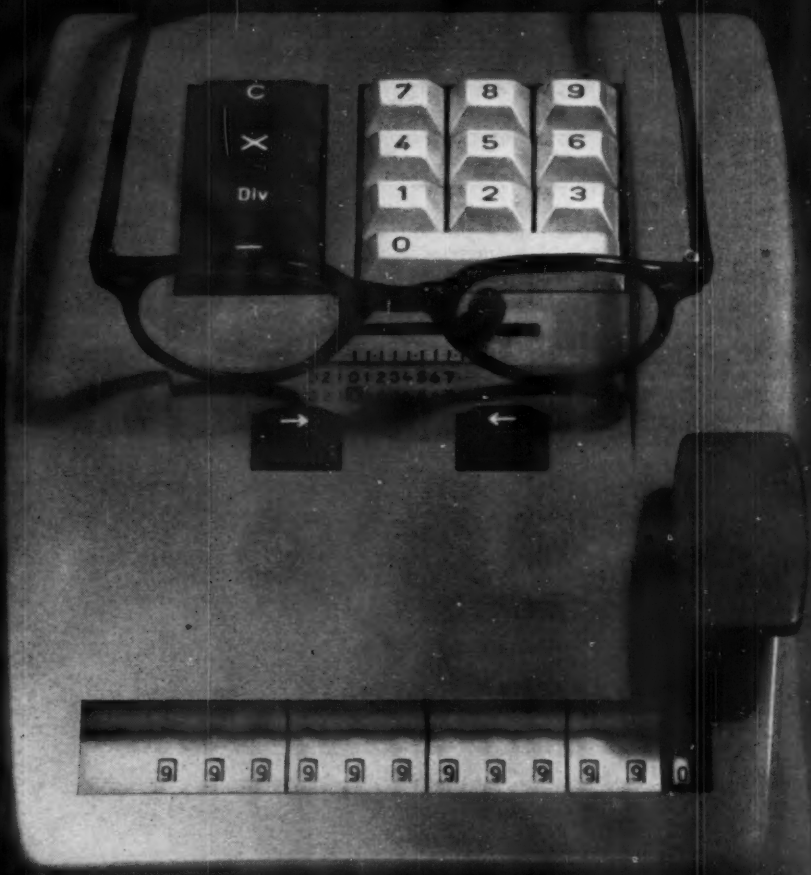
BLUEPRINT FILES

Martin Stamping & Stove Co., Huntsville, Ala., announces the Draw-In-Dex cabinet that keeps blueprints, drawings charts, and similar materials in order. Designed to provide readily accessible filing for as many as 1250 prints, the cabinet comes in two sizes. Model 27B accommodates prints up to 27" x 42". Model 36C handles prints to 36" x 42". Both



can accommodate larger sizes when additional hanger strips are used. Prints hang free, safe from dust, and can be indexed for quick identification. Aluminum hanger strips, punched to match any standard two-hole paper punch, are optional. Draw-In-Dex cabinets are of all steel construction in standard office gray with cylinder locks. Manipulation-proof combination locks which meet military security requirements are available on special order. **For More Information Circle No. 146.**

BRAINCHILD



BOHN CONTEX CALCULATOR

This amazing little machine weighs only 6 pounds, slips into your briefcase or your desk drawer, yet does just about everything a big, heavy-duty office calculator does. It's the new Bohn Contex, the brainchild of top international designers who have created a full-fledged calculator light enough to carry anyplace, easy to use, workable anywhere, far less expensive and every bit as accurate as its cumbersome ancestors. It's only 10 inches long, 7 inches wide and 3¾ inches high, yet it adds, subtracts, multiplies *and divides.* No other hand-operated machine offers such speed. You can work it twice as fast as an electric adding machine. You can use it anywhere—executive office, accounting department, sales route, business trip, hotel room, plane, train, home . . . anywhere. It has *only* 10 keys, enters 10 figures, totals to 11 columns, includes an automatic decimal indicator. And it's so simple you learn to work it in minutes. Most remarkable of all is its price. Just $125.* You can actually buy 5 Bohn Contex Calculators for the price of one big office machine. Even if you figure only a few minutes a day, you can now have your own personal calculator always at your finger tips. See it, try it at any of 500 dealers. Here are a few. For more details or name of dealer nearest you, write: Bohn Duplicator Company, Dept. H-1, 444 Park Avenue South, New York 16, N. Y.

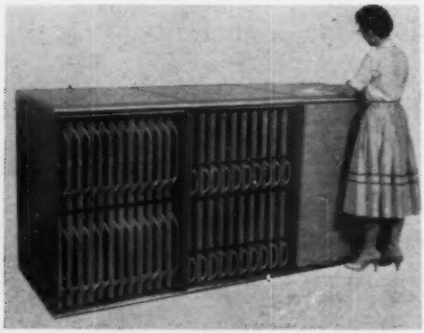
*FEDERAL TAX $7.50; CARRYING CASE TO MATCH $12.50

Atlanta, Ivan Allen; **Austin, Texas,** Hemphill's; **Akron,** Summerville's; **Baltimore,** Lucas Brothers; **Boston,** Thorp & Martin; **Canton,** Whitaker Bros.; **Charlotte, N. C.,** Pound & Moore; **Chicago,** Horder's; **Cincinnati,** Pounsford's; **Cleveland,** Burrows, Broome Business Machines; **Columbia, S. C.,** R. L. Bryan; **Columbus, Ohio,** Independent Supply; **Denver,** Kistler's; **Detroit,** Gregory & Leonard; **Fort Worth,** Specialty Service; **Houston,** Maverick-Clarke; **Indianapolis,** Rex Business Machines; **Jacksonville,** Sanford Hall; **Los Angeles,** Aldine Co., May Co., Office Machines Inc., Westwood Office Supply; Long Beach, California Calculator Co.; Pasadena, Office Automation; Sherman Oaks, Valley Stationers; **Louisville, Ky.,** George G. Fetter; **Louisville, Ga.,** Cato Calculator Co.; **Memphis,** S. C. Toof; **Miami,** Accurate Business Machines; **Milwaukee,** Rite-Type Co.; **Minneapolis,** Farnham's; **New Orleans,** Amann Business Machines; **New York,** Abaco Office Machines, Alpha Typewriter & Adding Machine Corp.; Mineola, L. I., D. Waldner Co.; **Oakland, Cal.,** Allied Paper Co.; **Orlando,** George Stuart; **Philadelphia,** Pomerantz, Noll Business Machines; **Palo Alto, Cal.,** Delmer Israel; **Pittsburgh,** Milton Wiener; **Rochester, N. Y.,** Rochester Stationery; **St. Louis,** Von Soosten & Co.; **San Antonio,** Maverick-Clarke; **San Francisco,** Schwabacher-Frey, Quality Office Machine Co.; **San Jose,** Kennedy Business Machines; **Sacramento, Cal.,** H. S. Crocker; **St. Petersburg, Fla.,** Pinellas Printing & Stationery; **Seattle,** Lowman & Hanford; **Toledo,** Whitaker Bros.; **Tucson, Ariz.,** Tucson Office Supply; **Vernon, Cal.,** Vernon Stationery & Printing; **Washington, D.C.,** Ginn's, Stockett-Fiske; **Canada:** Montreal, Scandinavian Business Machines

For More Information Circle No. 264

TAB PANEL & REEL STORAGE

Data/Storage, Inc., Box 815, Preakness Sta., Wayne, N. J., manufactures the Data/Stor line of machine accounting storage equipment for wiring panels and tape reels. This equipment is designed to exactly conform to measurements of leading tabulating machine manufacturers. Although the storage capacity of this equipment is greater, it occupies 35% less floor-space since units are only 30" wide. Units are made with self-storing steel tambour



doors at no extra cost, and made of heavy gauge steel with two-toned baked gray, vinyl mar-resistant finish. The Data/Stor line is also available in standard IBM machine colors: flame red, azure blue, lemon yellow and royal blue for modern styling in machine departments. The standard unit can be used in 42 different arrangements and no tools except a screwdriver are needed to change layouts on location. One-piece, 18-gauge, satin finished stainless steel trim protects the ⅝" laminated wood Formica topped work surface which is at true counter height. **For More Information Circle No. 117.**

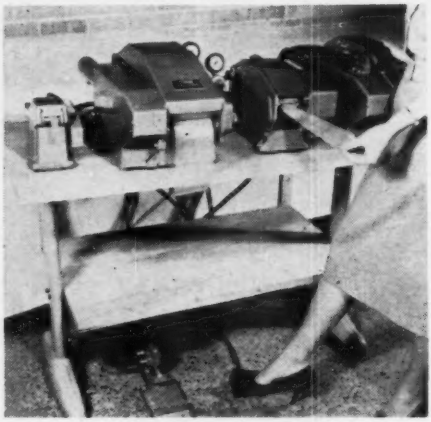
BALLPOINT PENCIL

Gardner Rubber Stamp Co., 116 S. Washington St., Wilkes-Barre, Pa., offers

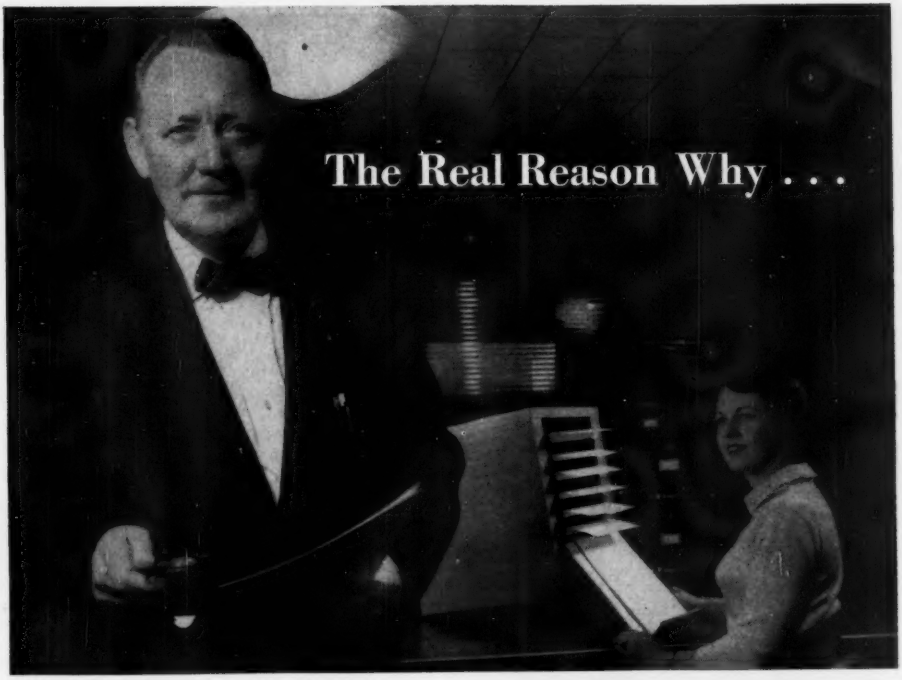
its Super-Riter Fine Point ball pencil with money back guarantee. It has .031 fine ballpoint and is available with red, blue, green or black ink for accountants, auditors, bank personnel, bookkeepers, stenographers, etc. Priced at 39c each, less for a dozen or more. **For More Information Circle No. 122.**

AUTOMATIC TAPE DISPENSERS

Minnesota Mining & Mfg. Co., Dept. JO-103, 900 Bush Ave., St. Paul 6, Minn., offers a complete line of air-operated dispensers for large volume taping operations. Scotch air-operated definite length dispensers come in 14 different portable models that automatically dispense pressure-sensitive tape to almost any pre-set lengths. They can be activated by the push of a valve, flick of a switch or simply by removing a tape strip from dispensing blades. Some are triggered by slight foot,



finger, knee or arm pressure; others respond to products on conveyors or assembly lines and operate as fast as the line can move. The machines reduce tape waste, dispensing time and effort. Operator's fingers cannot be injured during rapid dispensing. Available complete with air hoses, valves, regulators, gauges and other necessary attachments — ready for use. All can be safely used in areas where slight electrical contacts or extreme vibration might set off explosions. Can be set to automatically deliver tape at preset intervals, leaving both operator's hands free. **For More Information Circle No. 131.**



——WE BOUGHT A NEW COLLAMATIC PORTABLE ELECTRIC COLLATOR

"We don't do a world of collating, but enough to present us with a problem. We've considered buying a collator for years, but *We Could Never Justify The Investment*. The new Collamatic "Desk Top" is just what we wanted. It suits our production needs and our pocketbook to a 'T'."

Yes, now every office can enjoy the benefits of Electric Collating. Perhaps you collate only occasionally or have only 1 or 2 big jobs a year. It really doesn't matter. The new Collamatic "Desk Top" is so very inexpensive, even light, occasional collating will justify its being a part of your office "Staff".

You'll be amazed at how productive the Collamatic "Desk Top" really is on all types of 8½" x 11" paper. It's light and portable and can easily be moved from department to department.

Send for literature or request free demonstration.

Remember too, Collamatic manufactures a complete line of inexpensive Console Electric Collators, featuring exclusive APC, Automatic Production Control. Literature included with "Desk Top" brochure.

Fully Electric and Only **$149.50**
F.O.B. Wayne, N.J.

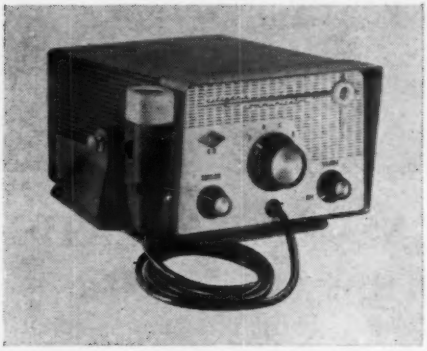
COLLAMATIC

COLLAMATIC CORPORATION
Wayne, New Jersey

For More Information Circle No. 354

TWO-WAY RADIO

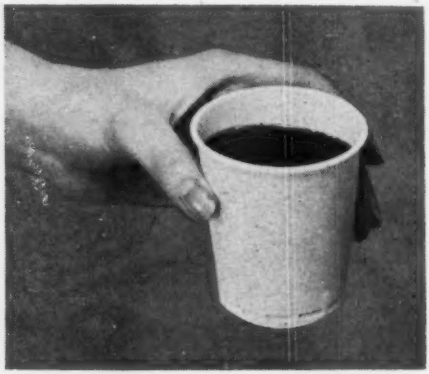
Gonset Div., Young Spring & Wire Corp., 801 S. Main St., Burbank, Calif., announces its low-cost G-12 Citizens Communicator two-way radio which operates within the 26.965 to 27.235 megacycle band assigned by FCC for virtually unrestricted business or personal use. Four crystal-controlled channels for both transmitter and receiver allow operator to instantly switch to other channels if voice traffic is especially heavy or interference is present on channel in use. Also permits various stations in a system (cars, trucks, aircraft or boats) to be assigned different frequencies. Simple, non-technical operation—no tuning. Channel is selected by front-panel switch. Full press-to-talk control by push switch on microphone. Tuning indicator on panel provides visual



monitoring of transmitter performance, insures that equipment is providing peak output at all times. Ruggedly built for heavy-duty industrial or commercial use. Meets every FCC and field requirement. Transmitter is rated at 5 watts power input. Superheterodyne receiver with RF stage has automatic noise limiter and adjustable squelch for muted standby. Provides 2½ watt audio channel with built-in speaker for monitoring at some distance from set. Transmitter, receiver and 12VDC/117VAC universal power supply are all in one compact unit measuring only 4½" high, 7" wide and 10" deep; weighs but 11 lbs. Complete with press-to-talk microphone and crystals for one channel, $149.95. **For More Information Circle No. 137.**

DISPOSABLE CUPS

Scott Paper Co., Vending Cup Div., 980 N. Delaware Ave., Philadelphia 23, Pa., has developed an all-plastic 7 oz. disposable cup made of two plies of impact polystyrene, the outer ply foamed to provide insulation and prevent discomfort for the user. Called the ScottCup 7 PHV, it is



being marketed to the vending trade nationally. In addition to the hot cup, 7, 9 and 10 oz. cold vending and soda ScottCups are available. The hot cup's insulation eliminates vapor rings on desk tops and other surfaces. It has a non-skid, non-flaking exterior and a smooth white liner with smooth, hard lip for drinking comfort. Seamless to prevent leaking. Stainless, odor-free plastic liner offers better appearance and flavor retention. The all-plastic ScottCup is unaffected by boiling water temperatures, emitting neither odor nor taste. The absence of a lip flag eliminates vending difficulties caused by flags or soft lips. ScottCups do not shrink due to heat. Although they are strong and flexible, they can be crushed for ready disposal after use. **For More Information Circle No. 153.**

PRINTS FROM MICROFILM

Anken Film Co., Newton, N. J., has developed Projection Mono-Copy, a silver sensitized reproduction paper for making enlarged positive copies directly from negative microfilm. This eliminates three-tray manual developing. With Projection

By Special Arrangement with 3 Top Makers of Office Equipment, We Can Now Offer You up to

39% OFF BY MAIL!

IMMEDIATE DELIVERY • SATISFACTION GUARANTEED • SEND NO MONEY

You'll see their famous names on the equipment you buy. In fact, you can see the same equipment selling right now in regular retail outlets at prices up to 39% higher! You save by ordering direct through the mail.

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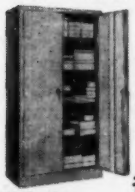
FREE
WITH EVERY ORDER OF $25 OR MORE
(Each additional $25 earns you another)

CASH & VALUABLES BOX
All steel. Removable cash tray. Lock, key. Gray enamel 9 7/8"W x 3"H x 4 3/8"D.

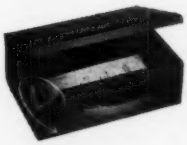


#100 DOUBLE-DOOR STORAGE CABINET, 4 ADJUSTABLE SHELVES. Heavy-gauge steel. Reinforced doors. 3-point locks. Chrome handles. Green or gray. 36"W x 18"D x 72"H.* REG. $55.00.

ALLSTATE PRICE $39.95

#106 Same, but 42" high, 2 shelves. REG. $53.20. ALLSTATE PRICE $31.95

Write for low prices on other sizes and comb. storage-wardrobes.



#H300 ASBESTOS LINED SECURITY BOX! ¼" layer of Johns-Manville asbestos insulation. Certified fire-resistant. Strong lock, handle. Steel shell. Gray, green or brown. 13 x 8¼ x 4¾". REG. $7.95.

ALLSTATE PRICE $7.49

#H400 Same, but 6½" deep. 2 handles. REG. $10.95

ALLSTATE PRICE $9.49

#1206 BOOKCASE OR UTILITY CABINET. Furniture steel. 2 adjustable shelves. 36"W x 12"D x 42"H. Green, gray, brown, mist green or desert sage.* REG. $31.50.

ALLSTATE PRICE $21.95

Also cabinets with sliding steel or glass doors. Write for low prices.

#154 STEEL FILE CABINET WITH 4 ROLLER-BEARING DRAWERS. All drawers lock. Flush handles. Follow blocks. Gray, mist green or tan. 52"H x 18"D x 15"W. REG. $34.95.

ALLSTATE PRICE $29.95

#152 2-drawers. REG. $23.95.

ALLSTATE PRICE $19.95

#153 3-drawers. REG. $29.95.

ALLSTATE PRICE $24.95

*Shipped flat.

#438 RACK-N-FILE STORAGE UNIT WITH 9 FILE BOXES. Cross-braced green steel rack. Brown boxes hold letter- or legal-size papers. Double-thick at stress points. Flush front. Overall: 42"W x 16"D x 38"H.* REG. $23.40.

ALLSTATE PRICE $19.95 (COMPLETE)

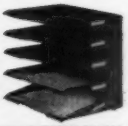
#432 2-shelf unit, 9 boxes. Adds onto #438 REG. $19.80. ALLSTATE PRICE $17.95

#250 9 boxes alone. REG. $9.00.

ALLSTATE PRICE $7.50

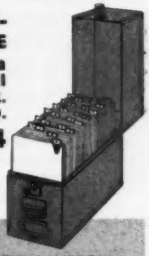
25 boxes alone. REG. $25.00.

ALLSTATE PRICE $15.00



#512 5-TIER LETTER TRAY. For desk, wall. Extra large slanting tiers. Identification cards on both sides. All steel. Gray, mist green or desert tan. 12½"H x 12"W x 9"D.

ALLSTATE PRICE $7.98



#ST-7 PORTABLE STEEL TRANSFER CABINET FOR MACHINE POSTING EQUIPMENT. A file, a storage case, a carrying case all in one! Reinforced handle. Lock. Gray baked enamel. 18¾" deep. For ledger cards 11 x 7". ALLSTATE PRICE $9.94

#ST-8 For cards 11 x 8½". ALLSTATE PRICE $9.94

ORDER FROM:
ALLSTATE OFFICE SUPPLY, INC.
30 CHURCH STREET, NEW YORK 7, N.Y. Dept. O-560
SPECIFY NUMBERS AND COLORS

For More Information Circle No. 317

WITH THE

STAPLEX AUTOMATIC STAPLER

Hand stapling is a pain in the palm! It's time-wasting, costly, inefficient. And totally unnecessary—because Staplex now has the automatic stapler to fit *every* need.

Here's how a Staplex can save you money by *automating* your stapling.

- It cuts stapling *time* 50%—frees employees for other jobs.
- It improves employee efficiency because it takes the *drudgery* out of stapling.

How much money can the Staplex actually save YOU? It's easy to find out. Just fill in the coupon below. We'll send you estimated savings, based on the Staplex model we recommend for your needs. You'll see how quickly a Staplex *pays for itself.*

FOR PROOF OF SAVINGS—MAIL TODAY!

The Staplex Company
775 Fifth Avenue, Brooklyn 32, N.Y.

We staple approximately _____ hours per day. Average number of pages per stapled unit is _____

☐ Send estimated savings plus free brochure.
☐ I'm interested in a ten-day free trial. No obligation.

Name_____

Address_____

City_____ State_____

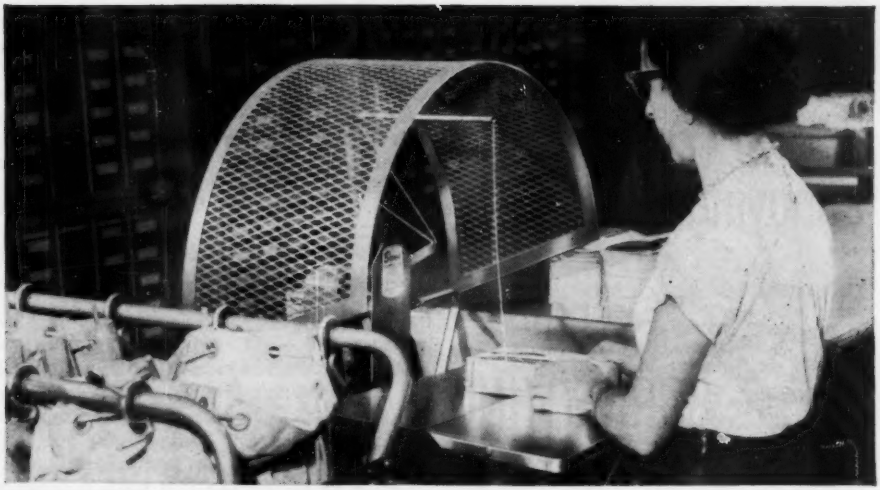
For More Information Circle No. 374

Mono-Copy, operator exposes in the normal manner on any standard microfilm reader-printer or microfilm projection equipment. One-step developing is done in Anken's Monobath solution (a combination developer and stabilizer), using a machine processor of the Anken 27 type. No further fixing or washing is necessary. Operations can be carried on under subdued light conditions. Projection Mono-Copy can be used with all types of negative microfilm—in aperture cards, strips, jackets or roll film from all sizes up to 105 mm. Cost for an 8½" x 11" copy is approximately 5c. **For More Information Circle No. 114.**

MACHINE STANDS

Apsco Products, Inc., Dept. 27-5, Box 840, Beverly Hills, Calif., offers the Perfection line of office machine stands to meet just about any requirements for electric typewriters, calculators and other of-

fice machines. These rugged tubular steel stands are designed for beauty, strength and stability. Each is mounted on 3", rubber-tired casters for quiet, easy movement for one location to another. An



MANPOWER, Inc., Milwaukee, Wisconsin

cuts tying time 90%

on 400,000 mailers a month!

"We tie out over 400,000 mailers per month with our Bunn Tying Machine ...save about 90% in tying time and 50% in operating costs...and our Bunn machine is capable of even greater volume when we need it for extra loads," says Daniel C. Corrigan, Advertising Manager of Manpower, Inc., world's largest temporary help and complete business service.

Anyone can operate a Bunn Tying Machine, and the variety of tying jobs it can do is endless. The machine adjusts automatically to size or shape... ties mail, packages, cartons, literature, cancelled checks. Anything that can be tied by hand, can be tied up to 10 times faster by a Bunn Tying Machine.

A Bunn Tying Machine will cut time and costs in your business, too. Write today for information.

PACKAGE TYING MACHINES—SINCE 1907

BUNN

B. H. BUNN COMPANY

7605 Vincennes Ave., Dept. OF-50 Chicago 20, Ill.
Export Dept.: **10406 S. Western Ave., Chicago 43, Ill.**

MAIL THIS COUPON NOW

B. H. Bunn Co., Dept. OF-50
7605 Vincennes Ave., Chicago 20, Ill.

Please send free booklet which illustrates how we may cut costs with Bunn automatic tying.

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Company_____

Address_____

City_____ Zone____ State_____

9718

For More Information Circle No. 281

Errors are annoying —but CORRECTING IS AMAZING !

Graypoint Eraser No. 3650 (No. 365 without whisk)

There's nothing like a Graypoint to sooth a secretary's temper, to smooth away annoying errors, to save typing time!

Typists appreciate wood-cased Graypoint Erasers, made like a pencil, comfortable and convenient to hold, like a pencil. Sharpen in a pencil sharpener or with a knife, like a pencil—to a point that picks-out typing errors cleanest, fastest. Graypoints won't roll off typists desks.

Graypoint luxury gray rubber erases letters and words so easily that girls get a thrill out of these superb erasers just as soon as they use them. Quite likely, *you'll* never notice the erasures. Multiply the time each girl saves by the number of typists in your office and you'll see substantial reduction of overhead. Give your girls Weldon Roberts Graypoints.

Order from your stationer

WELDON ROBERTS RUBBER CO.

365 Sixth Avenue Newark 7, N. J.

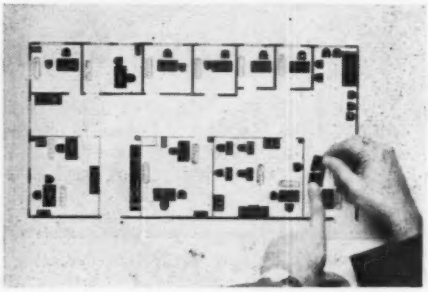
World's Foremost Eraser Specialists

For More Information Circle No. 376

elevating device permits the stand to be lowered to the floor at the touch of a hand, or raised to allow movement of the stand. While some models are designed for through-bolt assembly, others feature welded construction. All are solid, sturdy bases for smooth, vibrationless machine operation with virtually no danger of tipping during use. For free catalog, **Circle No. 276.**

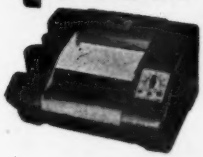
OFFICE LAYOUT KIT

Planoramics, Inc., 631A East 1st St., Boston 27, Mass., announces introduction of an office layout kit, scaled ⅛″ equals 1 ft., for planning future office expansion. Kit allows the space planner complete freedom in plotting areas of any size and shape. Planoramics has previously featured the kit in the ¼″ to 1 ft. size. It consists of a 20″ x 50″ plastic planning board with grid, marking pencil, tape and symbols for every type of office furniture and equipment, (48 different size templates—over



1200 pieces). With this layout kit, no drawings, draftings, or costly erasures are necessary. The self-adhering vinyl symbols are placed on the translucent plastic grid board by hand. They adhere firmly until removed and can be reused indefinitely; there is nothing to replace. Since the plastic itself is the adhering agent, there is no stickiness. A wipe with a dry cloth is the only cleaning needed. The kit is available with grids scaled to ⅛″ or ¼″ to the foot in either black or non-photographic blue, for photocopying. For literature and free sample, **Circle No. 124.**

YOU GET THESE 5 EXTRA BENEFITS WITH A QUICK SILVER OFFICE COPY MACHINE



This general-purpose office copy machine will handle all your routine copying needs—letters, invoices, news clippings, reports—**anything**—with the greatest of ease. And, Quick Silver will also give you all the **extra benefits** listed below. No other office copy machine is so versatile as Quick Silver, a completely new photocopy process.

1. **UNLIMITED NUMBER OF QUALITY COPIES FROM ONE MASTER.** And every copy of the same high photographic quality. File the master and make additional copies from it whenever you need them.

2. **INEXPENSIVE COPIES.** Quick Silver copies are only 5 cents each! Only a single sheet of paper is used; the throw-away sheet has been eliminated.

3. **FAST COPIES.** Designed for volume, one Quick Silver '300' machine with a single operator will turn out the same number of copies per hour as two transfer machines and two operators! Naturally, that means more production for less money.

4. **PAPER NEGATIVES FOR OFFSET PLATES.** In 25 seconds and for only 5 cents Quick Silver will make a negative in your own office which would cost you $1.50 if you sent it out to be made.

5. **WILL COPY HARD-TO-COPY ORIGINALS.** Not only that, but Quick Silver can make a good copy from a blueprint or a photostat. It will make a copy of a copy... even a heat-transfer copy! And it does it in one pass through the machine, with no intermediate step.

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Gentlemen:

☐ Please arrange for a FREE DEMONSTRATION of Quick Silver in my own office.

☐ I'd like more information about Quick Silver. Please send your FREE folder.

Name _____

Company _____

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O-5

For More Information Circle No. 326

Shear-Action
CORNER ROUNDERS

MODEL 20

$25.50
Prices include one plug-in cutting unit.

MODEL 50 (Foot Operated)

ADVANTAGES:

1. Clean-cut shearing—no chopping.
2. Self-honing knives stay sharp longer.
3. Automatic chip disposal.
4. No bolting of knives to head.
5. Change cutting unit in 3 seconds.
6. No replacement of cutting blocks.

$78.00

Write us for details.

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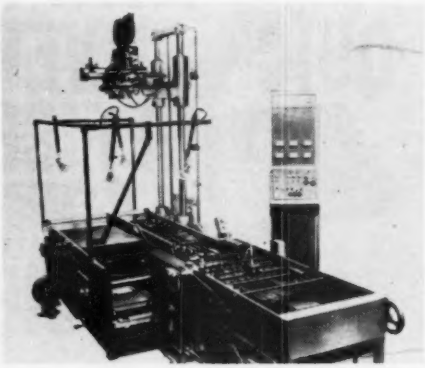
485 Hague St. • Rochester 6, N. Y.

For More Information Circle No. 377

AUTOMATIC PLAN MICROFILMER

De Florez Co., 200 Sylvan Ave., Englewood Cliffs, N. J., announces a high-speed machine for microfilming engineering drawings. It automatically feeds drawings from a pile, registers them, conveys them under the camera, adjusts illumination to the proper level, photographs the drawings, and delivers them in a pile. Sheets up to 22″ x 34″ are handled, as are roll drawings up to 42″ wide. The machine microfilms up to 1200 drawings per hour and is available as presently engineered or with design modifications to microfilm printed matter, operate at different speeds, handle different sizes, or meet other diversified conditions. Drawings of uniform size are



stacked in a pile at the head of the machine. Vacuum cups pick up the top drawing and advance it through a series of rollers to the squaring and registration station where three photocells activate electromechanical devices to square and adjust sheet to proper position under the camera. The drawing is next forwarded to the photographic station where an exposure-control photocell scans it and adjusts illumination to produce a uniform background density on the microfilm frame. Camera automatically photographs the drawing, after which it is advanced and stacked on delivery pile. Roll drawings are microfilmed a section at a time. The leading edge of the roll is placed between grippers and drawing is mechanically unrolled and indexed forward for

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Next to a run in my new nylons . . . nothing annoyed me more than getting stuck with the dreary job of walking around a table gathering duplicated pages into sets.

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If the girls in your office suffer from collating blues, why not write the people at Thomas for complete information. If you're like my boss and me . . . you'll be glad you did.

Thomas Collators Inc.
100 Church St., Dept. B, N. Y., N. Y.

For More Information Circle No. 280

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527 MADISON AVENUE, NEW YORK 22, N. Y.
Telephone: ELdorado 5-6066

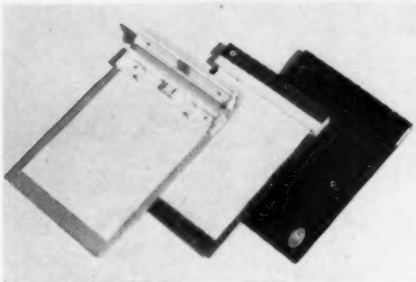
For More Information Circle No. 457

SCHERTEL

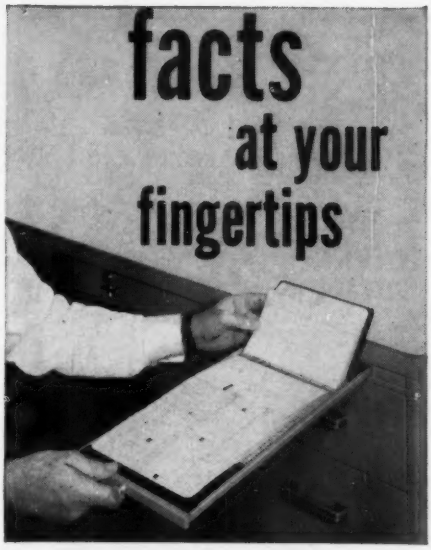
automatic photographing. Drawing is advanced 30″ between exposures and each exposure covers 34″ to provide a 4″ overlap on each frame. A variable overlap is obtained in the last film frame of a drawing sequence, regardless of the drawing length, so the last frame is completely filled. The complete drawing is then rewound into a container. Camera focusing, exposure, programing and monitoring of all phases of operation are remotely controlled from a console. Resolution of camera is excellent and equals 130 lines per mm at the center and 110 lines per mm at the corners. Accommodates 1000 ft. rolls of 35 mm film. **For More Information Circle No. 159.**

OPEN-END BINDER

Nifty Mfg. Co. Div., St. Regis Paper Co., 150 East 42nd St., New York 17, N. Y., announces the Space Saver binder, the result of two years testing and research, for which the patent is pending.



The binder comes in six colors: dark brown, light brown, dark blue, light blue, white and green; has punch holes at the top and its construction permits the top cover to be folded over so that a flat writing surface results. A pencil box with a magnetic closure is incorporated into the top of the binder so that a pencil is always at hand. Since the punch holes are at top, there are no metal rings to interfere with writing. This also permits left-handed persons to write as easily as those who are right-handed. Narrower and smaller school desks, many with writing arms, present no problem with this binder. There is no second cover to



Unique G/W visible record card tray skillfully concealed in the desk arm slide is an exclusive feature available only for Globe-Wernicke Streamliner® Metal Desks. Ideal for telephone listing, sales, credit, purchasing, personnel records, etc. Holds 50 cards (5″ x 8″), usable both sides, for 100 complete records. Hidden locking device assures record privacy. Record tray is removable. This inexpensive desk arm slide with visible card record tray quickly pays for itself by its indispensable service. See it at your G/W dealer now. Or write Dept. X-5.

GLOBE-WERNICKE

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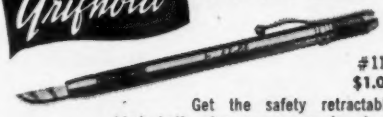
For More Information Circle No. 389

Grifhold OFFICE KNIFE



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Get the safety retractable blade knife whenever you need a sharp edge . . . for stencils, corrections, erasures. **Write today for free illustrated catalog of other tools.**

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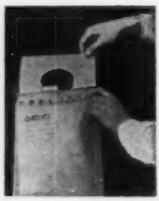

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PSC Hangers—for straight edge plates, negatives, stencils
DSH Hangers—for standard stencils
DGR Hangers—for foreign heading stencils
File-Grip (TM) Hangers—for large offset plates, blueprints, maps, etc.

Write For Complete Literature

ATLAS STENCIL FILES CORP.
16716 Westfield Avenue, Cleveland 10, Ohio

For More Information Circle No. 393

support since it folds over flat. The binder has found acceptance by those who use clipboards to make notes at meetings, airline stewardesses, doctors and many others. **For More Information Circle No. 194.**

CHAIRS

Columbia-Hallowell Div., Standard Pressed Steel Co., Jenkintown 88, Pa. offers a line of office chairs featuring molded contour seats. Manufactured as a "quality line at an economy price", the group includes six models: junior executive swivel chair with or without arms; two guest armchairs, a wide and a slim model; guest chair; and a contour seat version of the Ballerina Columbia secretary-posture chair. All have foam rubber seats. Despite the lower price

most features of the top-line Columbia chairs have been retained. These include angled armrests for maximum comfort; controlled comfort angle between back and seat; strong welded base; adjustment controls within easy reach; ball bearing swivel casters; and oversized chrome scuff plates on swivel models. A wide selection of decorator colors and Naugahyde upholstery are available. Standard frame colors include majestic gray, metallic gray, sea mist green, desert sage, blond tan and olive green. Fourteen color shades in Naugahyde are offered as standard selections. **For More Information Circle No. 160.**

Less than $800 for new Kodak Ektalith Loader-Processor with Transfer Unit and Kodak Ektalith Copying Unit

Important news from Kodak for all users of offset duplicators

Now... make photo-offset masters in less than 2 minutes without a darkroom!

New Kodak Ektalith Loader-Processor will be welcome news for everyone who wants to make "paper plates" right on the spot and realize greater savings in paper work.

Just three fast steps—Expose . . . Process . . . Transfer—and a reduced, enlarged, or same-size "master" is ready to whisk out hundreds of sharp copies. Entire job can be done in room light next to your camera and duplicator.

Another new timesaver—Kodak Ektalith Copying Unit—lets you make up to 15 direct paper copies (reduced, enlarged, or same size) without making masters or running your duplicator.

For free booklet phone local Kodak Ektalith dealer, or write Eastman Kodak Company, Graphic Reproduction Division, Rochester 4, N. Y.

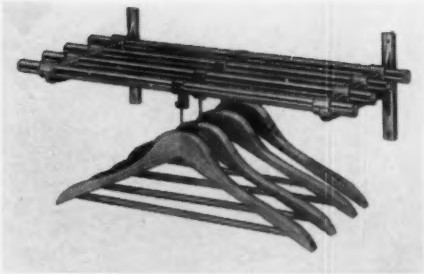
Price is list and subject to change without notice.

KODAK **Ektalith** METHOD ***... puts you ahead in offset***

Kodak TRADEMARK

For More Information Circle No. 243

WALL CLOTHES RACK



Vogel Peterson Co., Rt. 83 & Madison St., Elmhurst, Ill., has developed a compact, wall-mounted coat and hat rack for shallow and confined areas (behind doors, in small closets, etc.). The coat hangers hang parallel rather than perpendicular to the supporting wall. Coats are held four deep, spaced apart, flush with the hat shelf. The entire assembly, fully loaded, projects only 11″ from the wall. The garment hangers, while standard hangers in size and shape, have hookless attachments which slip into fixed receptacles that are permanently affixed to the hat shelf. Garments are easily and quickly hung in this manner without dragging on adjacent garments, twisting askew or slipping off hangers. Hat shelves are formed of parallel aluminum tubes, rigidly held in cast aluminum wall brackets and are available in lengths of 2 ft. or longer to fit. **For More Information Circle No. 152.**

PAPER STOCK

Kimberly-Clark Corp., Neenah, Wis., reports that the name of its Munising Opaque business paper has been changed to Kimberly Opaque. The paper is also being made in a brighter standard

ONCE UPON A WALL

—now one upon a desk

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Right in step with modern offices the Boston Champion Portable Pencil Sharpener saves time . . . builds efficiency.

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Blue
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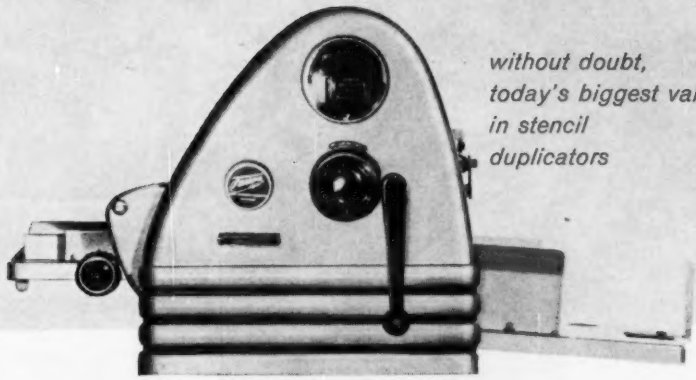
For More Information Circle No. 402

The lowest-priced paste ink duplicator with built-in inking system

Geha COMET



without doubt, today's biggest value in stencil duplicators

Here is a machine that is really ideal for every office. Quality built all the way through—with exclusive features you wouldn't dream of finding at such a low price. Turns out copies equal in every respect to those produced on expensive high-speed, heavy production duplicators. Handles all types of duplicating stock from post card size on up to 9½ x 15 (printing area: 8½ x 13½) including your office forms and direct mail. And—you can make fast color changes at no additional cost. Amazingly simple to operate—and clean to use because it uses paste ink. Geha's sturdy construction means years of trouble-free performance. Fully guaranteed.

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Arrange now for a free demonstration of the Geha Comet in your own office without obligation. Pin this coupon to your letterhead and mail today.

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For More Information Circle No. 242

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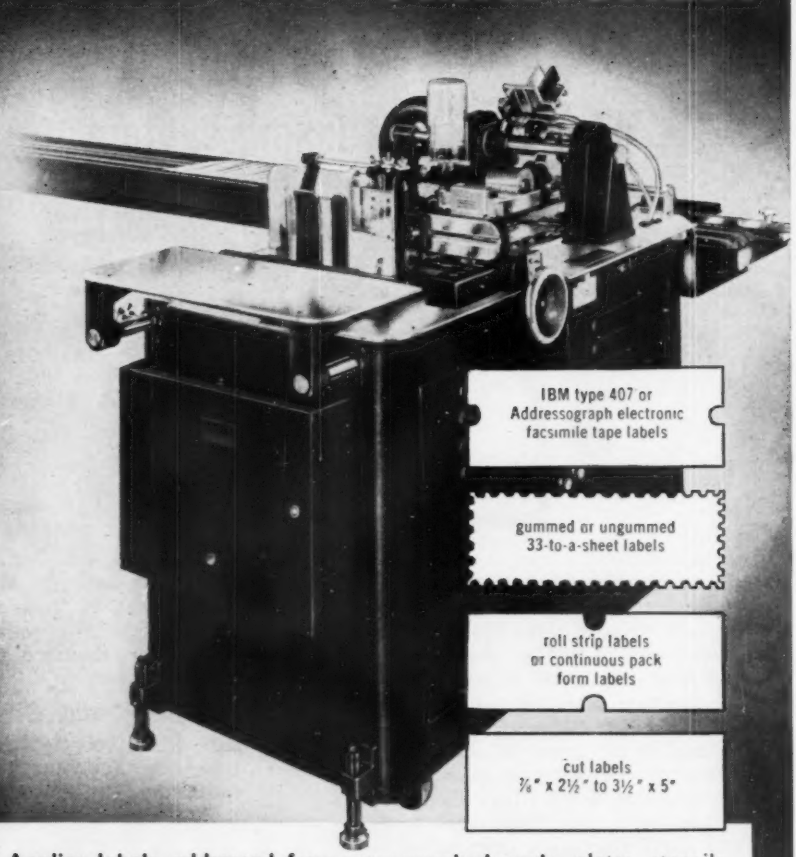

Applies labels addressed from your punched cards, plates, stencils and other addressing systems. *Even applies cut or individual labels!* Trims costs by applying in excess of 14,000 labels per hour. Handles post cards, insertion cards, pamphlets, brochures . . . all sizes of envelopes . . . and lightweight booklets, magazines, catalogs and quarter-fold tabloids. Compact, too! And so simple that it can be operated by your own personnel.

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Write for descriptive brochure

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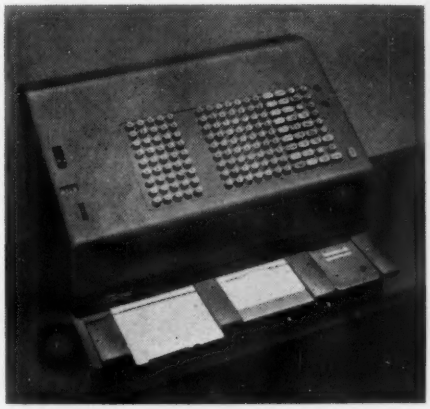
For More Information Circle No. 325

of whiteness and its opacity has been increased. It is recommended for envelope stuffers, circulars, sales letters, catalogs, booklets, etc. Kimberly Opaque comes in vellum and English finishes in weights from 40 to 100 lbs. **For More Information Circle No. 121.**

INSTALLMENT MACHINE

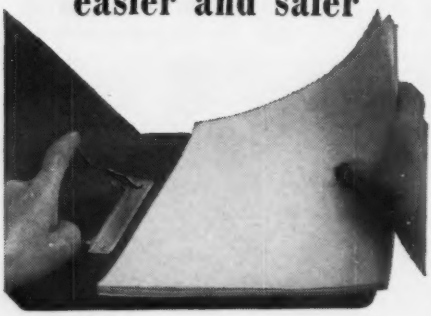
National Cash Register Co., Dayton 9, Ohio, makes the Class 42 window posting machine with 20 separate transaction and cashier totals. All types of installment transactions (cash sales, charge sales, down payments, collectors' payments, P & L payments, returns, allowances, etc.) can each be posted with a separate key which causes a distinctive symbol to print on all records. A separate lock-controlled proof total is provided for each key when machine is cleared at end of day. Two cashiers may operate the machine at peak periods; each is provided with a separate cash balancing total. Cash sale and payment keys require an identifying cashier key to be depressed with them to operate machine. Each cashier key provides a separate machine total which can be balanced to respective cashier's money till at the close of business. Three separate printing positions provide simultaneous



posting to customer and store records without use of carbon. When a payment on account is posted, amount of the payment is simultaneously posted to cus-

For More Information Circle No. 388

Make paper handling easier and safer



Get ADVANCO punchless paper holders

The perfect loose-leaf binder for all sorts of papers. Excellent for keeping papers together in your files, on your desk or in your briefcase. Works with fingertip pressure. No wires. No coil springs. Never loses shape.

No holes to punch—no holes to tear. Easily insert or remove sheets. Your papers are in order, *safe*—the Advanco clip bulldog-grips 1 to 150 sheets. Only 2 parts—lasts indefinitely.

ASK YOUR STATIONER!

If he doesn't carry Advanco, write us NOW for name of dealer nearest you.

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ADVANCO PRODUCTS, INC.

76-05 51st Avenue, Elmhurst 73, N. Y.

For More Information Circle No. 414

tomer's passbook, ledger card, and locked-in audit journal. Customer account balances are always current on all records. When posting charges or credits to an account, previous account balance is entered first. After transaction amount is posted, new balance is extended on all records by depressing a new balance key. **For More Information Circle No. 168.**

HAND CLEANERS

Consumer Products Div., Unexcelled Chemical Corp., Canaan, Conn., offers Wash 'n Dry pre-moist towelettes for cleansing and drying hands and face without leaving one's desk. The astringent

quality of Wash 'n Dry is said to leave the skin stimulated, clean and refreshingly cool. Used by 54 scheduled airlines. Each towelette comes folded to the size of a matchbook. Available in boxes of ten for 59c, 21 for $1, 60 in a gift box for $2.50. **For More Information Circle No. 134.**

MAGNETIC INK FORMS

Consolidated Business Systems, Inc., 30 Vesey St., New York 7, N. Y., announces availability of forms printed with magnetic ink. Consolidated is also introducing a consulting service for firms interested in employing magnetic ink character recognition as part of their forms handling procedure. Attention has been focused on

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Don't take our word for it. Mail the coupon today and get the facts about copying machines.

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☐ Please send me more details on office copying.

☐ Please have your representative tell me the whole story.

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Company _____

Street _____

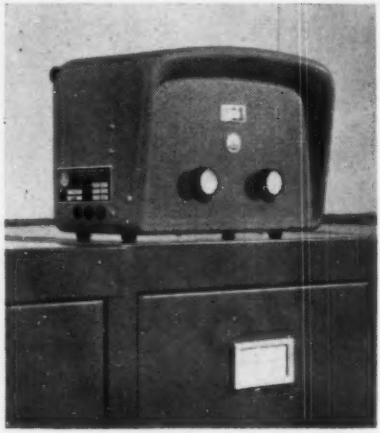
City _____ Zone ____ State _____

For More Information Circle No. 241

the speed, accuracy and efficiency of common machine language and magnetic ink character recognition, as a result of their adoption for automated bank check processing. Extensions of this application have been made for activities such as transportation reservations, mail-order operations, inventory records and retail accounting. For detailed information and samples of forms printed with magnetic ink, **Circle No. 163.**

BURGLAR ALARM

Walter Kidde & Co., Main St., Belleville, N. J., announces the Prox-O-Larm, a capacitance alarm to guard safes, filing cabinets, and other metal objects which can be insulated from the ground. It is approved by Underwriters' Laboratories and will protect up to 40 standard filing cabinets. It can be adjusted to trigger an alarm either when an intruder approaches to within a few inches of the protected object or only on actual contact. The alarm signal is transmitted by a single pole double-throw relay with contacts arranged to open or close any circuit for a local alarm or send a signal to a central station. Power for over 2000 hours of operation is provided by self-contained



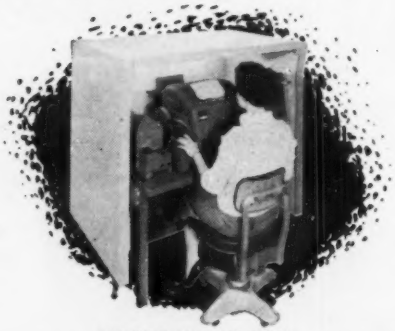
dry cells, or the unit can be powered by a 12-volt bell-ringing transformer, in which case the batteries function as automatic standby power. Device's fully tran-

. . . DECREASE OFFICE MACHINE NOISE 50%+ WITH Watkins ACOUSTORS

Clattering office machine noise is reduced by "50%" or more the minute you install Watkins sound conditioning "ACOUSTORS".

The ORIGINAL cabinets for noise treatment can increase your operating efficiency and accuracy, while adding beauty and lending a semi-private atmosphere to all your office machines.

. . . For economical, practical noise control, write WATKINS INDUSTRIES today for full information.



MODEL No. TE 3148
Please give machines measurements, makes, and models.

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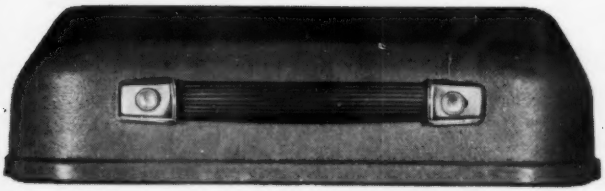
PORTABLE

Professional writers choose Cole above all other portables, because only Cole has all the important features they demand in a typewriter . . . Mist Green, Desert Sand or Cole Gray, Complete with matching carrying case . . . only **$94.50** plus tax.



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For More Information Circle No. 410

What PROGRAM-MATIC System Control does for your offset duplicator

The new ATF Program-Matic System Control

- simplifies duplicator operation
- cuts paper waste and down time
- shortens the duplicating cycle
- stops your duplicator automatically at end of run
- lets you stop any time...and resume without losing count

(Models of the ATF Program-Matic System Control are available for Multilith 1250 and Whitin Masterlith, as well as the ATF Chief 15 illustrated.)

American Type Founders

200 Elmora Ave., Dept. O, Elizabeth, N. J.

Please send descriptive literature on ATF Program-Matic

for ..... duplicator.
(make)

NAME ..... TITLE .....

COMPANY .....

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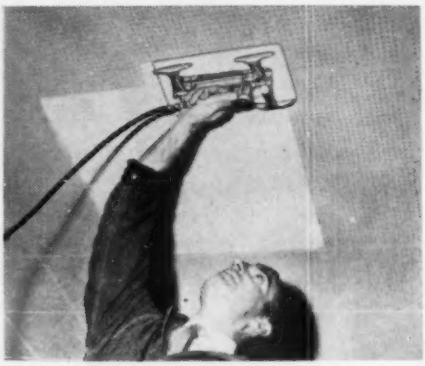
CITY ..... ZONE ..... STATE .....

For More Information Circle No. 396

sistorized printed circuit will automatically compensate for changes in temperature or humidity while retaining required sensitivity. Cabinet is 11" x 8" x 7" and suitable for mounting or being placed on top of the object(s) under protection. **For More Information Circle No. 470.**

WALL CLEANING MACHINE

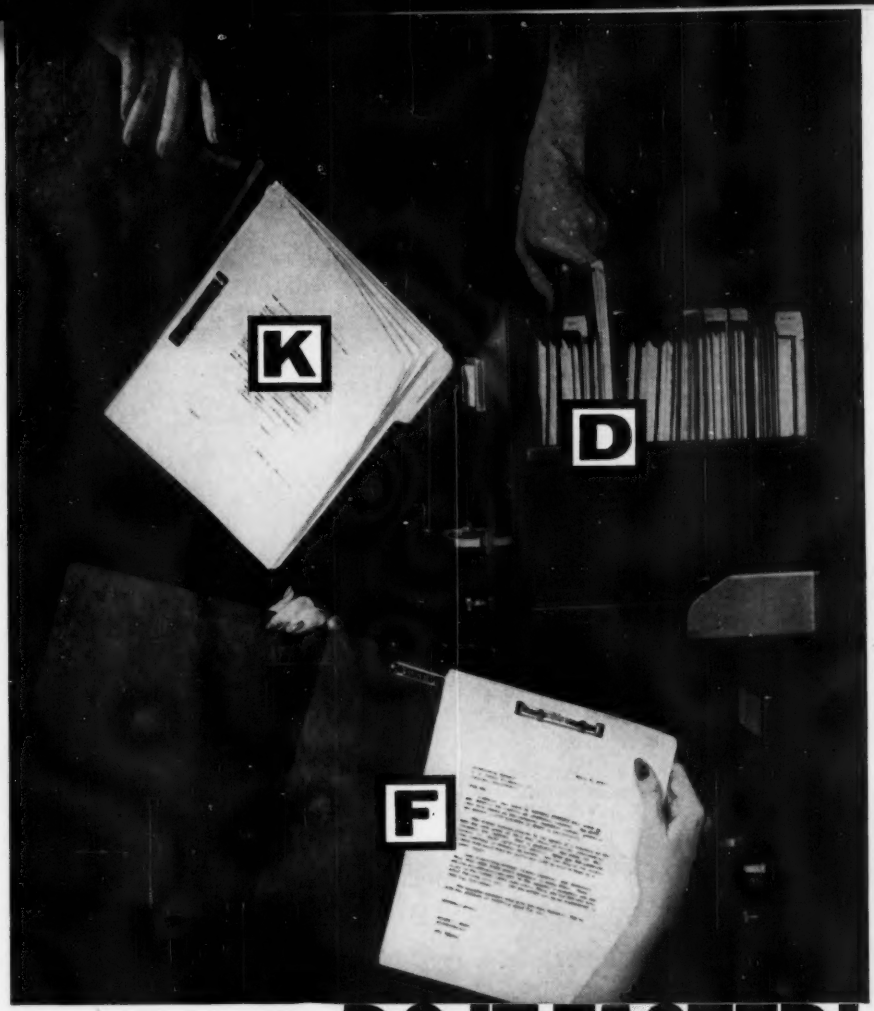
Central States Maintenance Co., 125 Marion, Oak Park, Ill., offers the Wall-O-Matic air-powered wall cleaning machine that operates noiselessly, utilizing compressed air for continuous eight hour operation. Walls are thoroughly cleaned and painted surfaces revitalized without mess, drip or streaking. No cumbersome drop



cloths are needed to protect rugs, furniture, etc. Due to its clean, quiet operation, the machine may be used in busy offices without disturbing normal activity. Using a special cleaning solution, the machine cleans plaster, painted, brick and stippled walls, and many types of accoustical ceilings. The portable unit does not require special operator training. A spray nozzle attachment cleans hard-to-get-at places and irregular shaped objects such as pipes, woodwork, etc. **For More Information Circle No. 127.**

CALCULATING CHARTS

Leo C. Shaw, 12th floor, 53 Park Place, New York 7, N. Y., produces original calculating charts for any purpose. These are done in typewriter type on an 8½"



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ASK FOR ACCO's new booklet "Ideas That Save Time and Space" —available free at office outfitters.

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For More Information Circle No. 227

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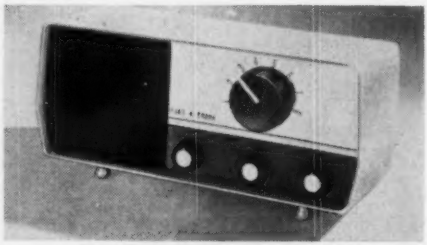
x 11" negative Photostat from which the user can make as many positive photocopies as desired. The charts are guaranteed to be accurate and are made to order for businesses where clerks, without calculating machines, do repetitive types of arithmetic problems. One chart with 350 answers would cost $10 and additional answers would be 2c each. **For More Information Circle No. 191.**

REGISTER & FORMS

Carteret Printing Co., Dept. 101, 480 Canal St., New York 13, N.Y., offers firms that use register forms, or are planning to install register forms, an opportunity to receive a free register machine with purchase of new printed forms. Carteret's RP-1 register has simplified forms release. It is light and compact, ideal for on-the-spot record keeping. Fingertip pressure frees a completed form for quick, easy removal. Model RP-1 is foolproof, with no complicated mechanism to jam up and prevent trouble-free operation. It accommodates standard sheet carbons. Carteret is offering 20 different standard forms, or any limited custom form that can be used with the Model RP-1 register machine, at no increase in price. This offer expires on July 1. **For More Information Circle No. 171.**

INTERCOM

Feiler Engineering & Mfg. Co., 8026 N. Monticello Ave., Skokie Ill., has developed the 8-channel Select-O-Matic



Port-A-Phone system which allows four separate conversations to be carried on at the same time. Affords complete 8-chan-

'TOP-DRAWER' FOR EVERY USE

1 pound

4 ounces

HIGHEST QUALITY PURE RUBBER BANDS—CONFORM TO FEDERAL SPECIFICATIONS. In 1-oz., ¼ lb. and 1 lb. boxes and bulk. ¼ lb. box has handy dispenser flap.

PLYMOUTH RUBBER COMPANY, INC.

CANTON, QUALITY SINCE 1896 MASSACHUSETTS

For More Information Circle No. 375

STENOTAPE

GELOSO

offers true "professional" dictating transcribing sound and efficiency

Listen to this performance...here is the soundest practice you can establish to end paper-work problems. LISTEN: StenOtape gives you the greatest clarity of sound in the dictating field today. This 6½ lb. compact unit, with its extremely sensitive microphone records every word perfectly within a 30 foot radius. You can actually dictate comfortably from any point in the room. Seated and relaxed, you can tape interviews, conferences, comfortably; and because of StenOtape's unique sound-fidelity, your secretary will hear and enjoy every word of your error-free dictation. Doctors and Dentists can play their post graduate educational tapes on StenOtape and enjoy superb playback quality. At the office, home or away, StenOtape records everything up to 2 hours on one tape...phone calls, conferences, dictation, *even music!* Hear the StenOtape difference now...it's an exceptional value!

only $179.95

FULL YEAR GUARANTEE Federal Tax Included

Check These Other Major StenOtape Features:

● Accurate word-counter. ● Built-in Speaker. ● 4" high, weighs only 6½ lbs. ● Travels in handsome attache case. ● Low-cost accessories available to cover every dictating-transcribing-recording situation. ● Precision designed by Geloso, Europe's largest integrated electronics manufacturer of communication equipment. ● Sales and Service Coast to Coast.

FREE! LIFETIME SUPPLY OF MAGNETIC TAPE MAIL THIS COUPON NOW!

AMERICAN GELOSO ELECTRONICS, INC.
251 Park Ave. So., Dept. 95, New York 10, N. Y.

Gentlemen: Please rush, without obligation, illustrated booklet "The Facts About Dictating Machines." I understand that should I decide to purchase a StenOtape this coupon entitles me to a lifetime supply (6 rolls) of reusable Magnetic Tape worth $15.00.* **Offer expires July 31, 1960*

Name_____

Address_____

City_____ Zone___ State_____

For More Information Circle No. 322

nel privacy, yet needs no cable laying. Two models are available: the All-Master and Master-Staff. Automatic volume control eliminates whispers from distant stations and blaring from nearby units. Message is automatically adjusted to come through at the same volume regardless of where the sending station may be. Static eliminator is conveniently located on the unit's front panel. Magna Power circuits provide up to ten times more power for clearer transmission over greater distances. Band-pass noise reduction circuits enable messages to come through even on noisy lines. Unit is housed in a gray cabinet with harmonizing front panel of silver, black and blue. **For More Information Circle No. 198.**

CARBON COPY SETS

Typerite Corp., 21 State Highway 10, Hanovxer, N. J., announces that it is now marketing Brownville Paper Company's Sea Foam Bond Carbonsets. Under the arrangement, Carbonsets will be available through regular office supply and stationery stores. Sea Foam Carbonsets, made up of carbon sheet attached to Sea Foam,

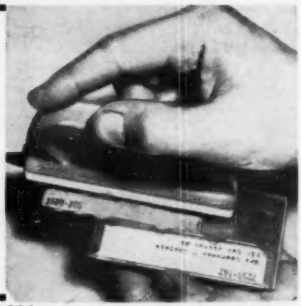
eliminate double handling of carbon paper and second sheets. Office efficiency is boosted, second sheets are neater and cleaner. The messy job of aligning carbons and second sheets is unnecessary, nor is there any need to count carbons

The Quik Stripper, Jr.

REMOVES PLATES AND CARDS FROM ADDRESSOGRAPH FRAMES

Strip plates and cards from frames quickly with this handy tool without touching inky plates. Saves finger nails and keeps hands clean. The Quik-Stripper, Jr., works with any kind of frame: small, medium or large—old style or new style—even frames holding stub-section plates.

Don't make plate stripping a chore. Keep your work up to date, from day to day, by equipping each operator with a Quik-Stripper, Jr. Sold on 5-day approval. Send for circular with details. Write Addressing Machine Co. of Calif., 667 Mission St., San Francisco 5, Calif. YUkon 2-2130.



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FUNCTIONAL FOLDING CHAIRS

De Luxe Folding Arm Chair

Available with or without tablet arm and as a fully upholstered arm chair in a wide choice of decorator colors and fabrics. Models for every office and institutional seating purpose.

WRITE 50TA FOR DETAILED INFORMATION

CLARIN MFG. CO., 4640 W. Harrison, Chicago 44, Illinois

For More Information Circle No. 461

Kenro "Vertical 14" Companion

The Kenro "Vertical 14" Companion is a compact, office-type camera designed to hold the Kodak Ektalith Loader-Processor and expose Ektalith Transfer Paper in the office without light glare. Has a cabinet to hold supplies, push-button exposure control, and removable copyboard for easy, table top loading. So simple and easy to operate that anyone can quickly become proficient in its use. Can also be used to make line and halftone negatives, Gevacopy and xerographic exposures.

Kenro "Vertical 18" and "Vertical 24" cameras can also be equipped to make Ektalith exposures. For details see your Kodak Ektalith dealer or write to

KENRO GRAPHICS, INC.

Cedar Knolls, New Jersey

For More Information Circle No. 226

and second sheets separately. Carbonsets are made with one-time carbons and are easily detached with a light pull. Fingers never touch carbons, resulting in clean copies and clean hands. For a free sample kit of Carbonsets, **Circle No. 477.**

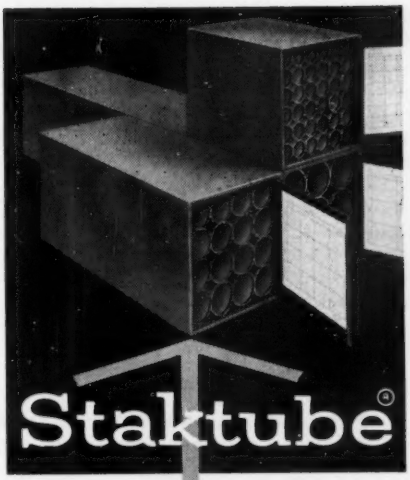
ELECTRIC STYLUS

Electro-Stylus Mfg. Co., North Highway 76, Forsyth, Mo., announces the Model 35 electric stylus for use on duplicating stencils and spirit masters. Because of its small size (7″ long and ¾″ in diameter), it is easily handled by office personnel who can draw or trace intricate

designs on wax and carbon masters. The stylus produces clean, clear-cut lines which may be very close together. Patterns can be superimposed on typewritten stencils, and typing can be done on a stencil over artwork, without tearing the stencil sheet. The Model 35 costs $14.95. A rectifier box for quickly producing widely spaced dotted screen effects is $7.95 additional. **For More Information Circle No. 128.**

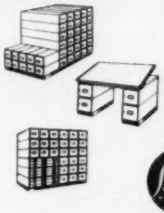
BOUND PUNCHED CARDS

Connecticut Tab Card Bindery, Inc., 780 Milldale Road, Cheshire, Conn., binds gangpunched tabulating cards so that they tear apart without leaving a trace of glue and are 100% trouble-free as proved in tests of millions of sets. Any number of columns can be precoded and interpreted if desired. There is a minimum of 2000



Stacor's lifetime steel

ROLL FILE SYSTEM



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1. *Safeguarding privacy.*
2. *Quieting the office.*
3. *Better hearing—noisy places.*

HUSH-A-PHONE

Model for all types of phones and dictating machines.

Write for Literature.

HUSH-A-PHONE
72 Madison Ave.
New York 16

For More Information Circle No. 399

cards to each code variation for binding. Sets of two cards with interleaved carbon, or cards with paper copies are also available. Cards with the corner cut on the left edge are better to bind but this is not mandatory. Sets are delivered in blocks of 50 or 100 for distribution, an advantage when working with cards away from the office. (Holders for factory use are available.) Deliveries scheduled to meet your requirements; bindery time approximately three to four weeks. For information on the numerous applications where data processing input can be the completed source record itself, **Circle No. 148.**

SHELF FILES

Supreme Steel Equipment Corp., 53rd St. & First Ave., Brooklyn 32, N. Y., makes Conserv-a-File shelf files which save up to 60% in floorspace to provide maximum filing capacity in minimum space. Conserv-a-Files make filing faster and finding easier and quicker. The contents of each compartment are visible at a glance. There are no drawers to open or close; no pushing or pulling. Conserv-a-File is available with or without doors in

a wide variety of heights, legal size or letter size, single or double-faced. For complete color literature, **Circle No. 186.**

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SERIES TRTJ
TIME RECORDER + TOTALIZER
from **$74.50**

The TRTJ Recorder automatically charts on tape the on-off time of any business machine to which it is connected. Distinguishes between **productive** and **idling** time. Access window permits notation of project number directly on tape. Visual meter shows total productive time. Easily installed from our complete instructions.

SERIES TTJ
TIME TOTALIZER
from **$26.00**

TTJ Totalizer automatically **adds** productive time of any business machine to which it is connected. Visual meter shows total **productive** time in any period. Pilot light indicates when business machine is being used. Easily installed from our diagrams.

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standard INSTRUMENT CORP. • 657 BROADWAY, NEW YORK 12, N. Y.

For More Information Circle No. 400

The Divisumma 24 combines a remarkable "memory" with high-speed, high-capacity calculation, and provides an easy-to-read tape record of all operations. A constant factor is automatically retained. Automatic re-entry of intermediate results makes it especially useful for multifactor multiplication and combined operations. No operator training is required. Olivetti Corporation of America, 375 Park Avenue, New York 22, N.Y.: branches or dealers in all principal cities.

olivetti

For More Information Circle No. 269

Don't break your back digging up buried information!

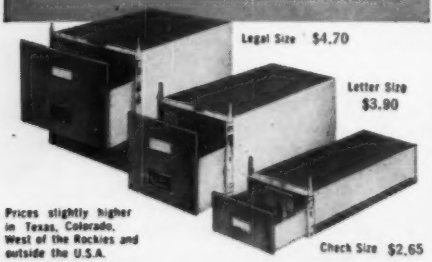
LOCATE YOUR RECORDS EASILY—No more fussing and fuming. With Pronto files your records are as active as your regular files.

BEAUTIFUL APPEARANCE—Finish in attractive olive green to match your regular office files.

STURDY CONSTRUCTION—Built of 275 lb. tested corrugated fibre board . . . reinforced with steel on the shell and the four corners of the drawers as well.

SAVE FLOOR SPACE—Prontos are constructed to interlock into solid units and stack as high as the ceiling.

PRONTO STORAGE FILES



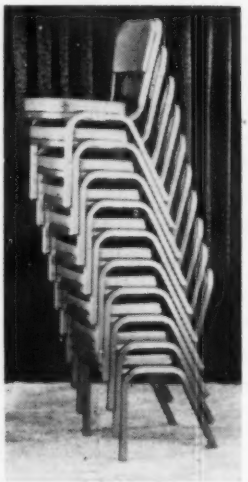
Prices slightly higher in Texas, Colorado, West of the Rockies and outside the U.S.A.

PRONTO FILE CORPORATION
415 MADISON AVENUE, NEW YORK 17, N.Y.

For More Information Circle No. 382

STACKING CHAIR

Ohio Chair Co., Youngstown, Ohio, makes Model 1155 chairs which can be safely stacked ten-high without metal touching metal or upholstery. Nylon buttons in the legs keep the metal frame of one chair from contacting the other. Frames are 1⅛″ aluminum tubing and can be anodized in any color. Seats are



made up of 2″ bonded foam rubber covered in a choice of upholsteries. Backrest is made up of ¾″ bonded foam rubber. The chair is available with or without polyethylene boots on rear and front legs; also with a metal ashtray attached to the back by metal glides. Ashtray can be easily detached for emptying, cleaning and storing when not in use. **For More Information Circle No. 118.**

CARBON PAPER

Old Town Corp., 750 Pacific St., Brooklyn 38, N.Y., announces Golden Dawn Plasti-Kleen, all-purpose, solvent-coated carbon paper with a self-recuperating inking that provides uniformly bright copies. It is said to outlast ordinary carbons by least three to one. The first to last copies are evenly inked and consistently legible with no spotty areas or gradations of color. Because the base

There once was a man with pride
whose sales were on a slide.
But it wasn't his appearance
that caused interference;
'Twas the poor old case at his side.

It was quite hard to face—but
his case was a disgrace.
So he "gifted" himself with a Stebco
—the case you need NEVER hide.

Be sure your case is an asset—not a liability. Be sure it's a Stebco, first choice of top-level men in blue-chip industries. Stebco Cases have the look of quality, the aura of prestige. Sensibly priced for a long-term investment. Remember Stebco when first impressions count.

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Stebco PRODUCTS, Chicago 7, Ill.

Over 41 years of quality business and student cases

For More Information Circle No. 240

DARKROOM SAFELIGHTS

For perfect darkroom illumination, select one of nuArc's dependable safelights. These sturdily constructed safelights have silver hammerloid finishes, and you will be able to find one to fit your particular need, whether it be for wall mounting, for ceiling suspension or the DL-6B which has an adjustable bracket for use on wall or table. See your dealer or write for Bulletin No. A2270.

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MAKES GLASS SURFACES SPARKLE

Just spray on and wipe clean. Contains no abrasives. Ideal for light tables, vacuum frames etc. 16 oz. spray can.

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For More Information Circle No. 381

tissue is reinforced, each sheet is extra strong. This prevents ripping, curling and breaking in the typewriter. Golden Dawn is a blend of dyes in plastic which penetrates the fibers of the paper immediately, removing the possibility of smeared or spotty copies and insuring sharply defined, clean duplicates. Manufactured in one weight and finish only for any and every typewriter. Boxed in reams of 8½"x11" or 8½"x14", Golden Dawn costs no more than other quality carbon paper. **For More Information Circle No. 161.**

FILMSTRIP VIEWER

Viewlex Co., 35-01 Queens Blvd., Long Island City 1, N.Y., offers the Viewlex Instant 35mm Filmstrip Previewer. The only working parts are the filmstrip advance knob, focusing knob and on-off switch.

Threading is virtually instantaneous. Starting the leading edge of a filmstrip in the transport slot threads itself automatically as the frame advance knob is turned. A slight twist of the focusing knob brings the image in sharp and clear on the 7" x 9" ground glass viewing screen. Setting up takes only a few seconds. As luggage type lid is opened, the screen snaps into place and unit is ready to operate. Light source is highly concentrated by a lens-mirror optical system that eliminates wasteful light spills and glare, and distributes a uni-

3 styles of STANDARD ROL·DEX

for fast, economical record handling

records roll to the clerk!

Rol•Dex, Jr.
Model RS-53

SMALL volume record handling. The Rol•Dex, Jr. – only slightly larger than a wheel file, has the advantages of much faster filing-greater capacity-variety of card sizes in the same unit-availabilty of records to outside reference. Designed for 2,000 to 12,800 records.

MEDIUM volume record handling. Up to 35,000 tab cards in Model RL-73. Other models for 5"x3" and 6"x4". A compact work center with rolling work shelf for the seated clerk.

LARGE volume record handling – extra filing space in the RC-Series. Will house tab cards (horizontal or on end) 8"x5" cards; 6"x4" cards, 5"x3" cards and MIB (2¼"x3") cards.

Model RC-73

Send coupon for free literature

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Rol•Dex Division, Dept O-3, Jamestown, N. Y.

Please forward literature on ROL•DEX Standard Units

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For More Information Circle No. 335

The Original MICROPOINT

INK-STIK*

Joins the Office!

*TRADE MARK, MICROPOINT, INC.
The King-Size Pen you NEVER Refill.

Order from your stationery supplier or direct, giving stationer's name and address.

It's no wonder. INK-STIK was made for the office. There's an INK-STIK especially for stenographers, secretaries, and receptionists . . . one for accountants and auditors . . . and another for general office work. There's even an INK-STIK for the office boy or mail clerk who needs a broad point for marking packages and writing shipping instructions.

- Slim, trim featherweight balance
- Writes 3.1 effortless miles
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- 8 distinctive ink colors . . . blue, red, black, green, brown, lavender, gold, turquoise.

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Utility-Point	39¢
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All-Purpose Marker	59¢

(Black and Red only)

MICROPOINT, INC. SUNNYVALE, CALIFORNIA

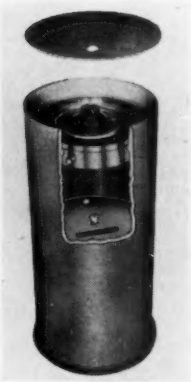
Creator of Advanced Writing Instruments

For More Information Circle No. 279

formly bright image in all areas of the screen. With luggage style carrying case in two-tone leatherette finish, unit measures only 4" x 6" x 12", weighs less than 6 lbs., costs $59.50. **For More Information Circle No. 157.**

FLOOR SAFES

Schwab Safe Co., Lafayette, Ind., announces addition of two Floor Safes to its line. These are designed to protect cash receipts and valuables in service stations, small stores, schools, professional offices and ticket booths. The safes are easily installed and are flush mounted for concealment. One model has two

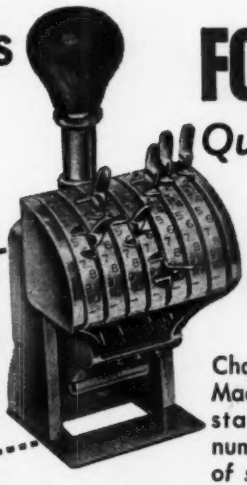


compartments with an envelope slot. The other has a single compartment. Both carry a Mercantile Class C insurance rate with a 10% rate deduction for U. L. Relocking Device Label. For additional protection each safe is equipped with a removable combination dial. It is impossible to open the safe without this dial. In addition to burglar and theft there is maximum fire protection. **For More Information Circle No. 141.**

PHOTOCOPY PROCESS

A. B. Dick Co., 5700 West Touhy, Chicago 48, Ill., introduces a multiple photocopy process which will give up to 12

CHANGE NUMBERS QUICK AS A WINK!



FORCE Quick Change

Force Quick-Change Numbering Machines permit instant changes of numbers *regardless of sequence*. They are ideal for numbering bank books, work cards, yardage tickets, drug and chemical labels, file folders, jackets, coded job tickets. Indicator figures alternately colored for easy reference. Heavy-duty model has ⅜" figures, available with up to 16 wheels. *Write for catalog.*

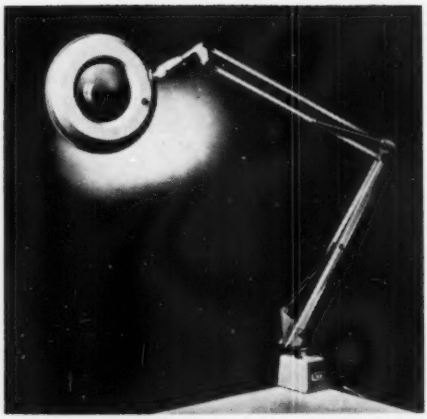
WM. A. FORCE & CO., Incorporated
216 Nichols Ave.
Brooklyn 8, N. Y.
Sales Offices: NEW YORK • CHICAGO • SAN FRANCISCO • MONTREAL

For More Information Circle No. 401

copies after a single exposure. Advantages of this process include increased speed in producing copies with a corresponding decrease in the cost per copy. It uses photocopy papers which quickly supply extra copies of letters, memos, legal documents and other business communications. Papers are immediately available in both 8½" x 11", and 8½" x 14" sizes. A wider range of sizes will be offered later. **For More Information Circle No. 126.**

ILLUMINATING MAGNIFIER

Swing-O-Lite, Inc., 13 Moonachie Road, Hackensack, N. J., offers an illuminating magnifying inspection lamp which combines a 22-watt circlite fluorescent lamp with a 5" magnifying lens, both contained in the swivel shade with the light automatically directed onto the part being magnified. The entire head of the unit swivels 354° to permit easy adjustment to proper working position. This provides glare-free lighting without distortion of the magnified image. Lamp's 45" arms



are fully adjustable and counterbalanced to prevent slipping. A simple thumbscrew adjustment locks arms in position. The Swing-O-Lite M-1C illuminating magnifying inspection lamp has a convenience outlet located in its base so that a series of lamps can be used in a row without intricate electrical wiring. On production

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Delta PRODUCTS
A DIVISION OF AIR ACCESSORIES, INC.
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Branch Office, Fort Wayne, Indiana
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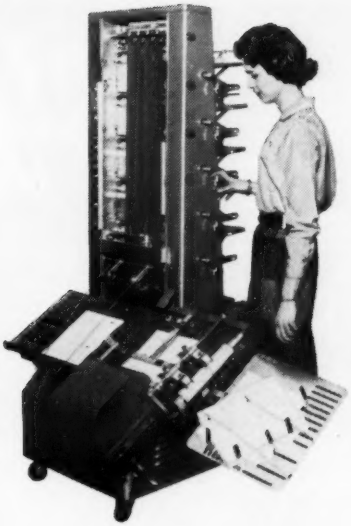
CITY_____ STATE_____

CUT OUT AND MAIL

For More Information Circle No. 403

THE VERSATILE FARRINGTON COLLATOR:



KEY TO EFFICIENT PAPER GATHERING

Fast, automatic gathering is the answer to collating in today's busy offices. The Farrington Collator (formerly made by J. Curry Mendes Corporation) is easy to set up, simple to operate, and has a full electric error detection system to prevent "misses" and "doubles." Vertical design mounted on casters makes it a compact space-saving unit that is easily movable.

The speed is amazing: 22,500 pickups per hour on the five-station model illustrated. Other models available with pickup capacity from 18,000 to 90,000 per hour. Unlike other collators, it runs so quietly that it can be placed in the office without disturbing your people.

For more information send in coupon below:

FARRINGTON®

FARRINGTON BUSINESS MACHINES CORPORATION
1210 Industrial Park, New Bedford, Mass.

Please send me more information on the Farrington Collator.

Name _____

Company _____

Street _____

City _____ *State* _____

For More Information Circle No. 260

SWIFT

presents the most remarkable adding machine ever designed!

unistroke

It is the world's lightest (6½ lbs.) and the most inexpensive (99.50) adding machine with nine column capacity, two-color printing and visible adding dials.

Once you have used the truly portable Swift Adding Machine in your office, store, home, or travelling —you will never be satisfied with any other!

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only $99.50 plus tax

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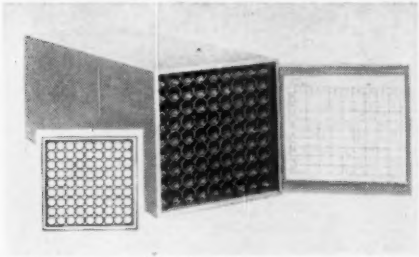
SWIFT BUSINESS MACHINES CORPORATION
GREAT BARRINGTON, MASSACHUSETTS

For More Information Circle No. 307

lines, this outlet can be used for electrical tools. Unit can be had with clamp, wall or pedestal mount, in gray. Attractively designed, it has a hard baked enamel finish, in brown or copper hard baked enamel, with U.L. approved electrical components. Lists at $36 less bulb with clamp or wall mount. For literature, **Circle No. 476.**

BLUEPRINT FILE

Stacor Equipment Co., 333 Emmet St., Newark 5, N. J., announces that quicker filing and finding of rolled prints, maps, charts, etc., is achieved with its 81-tube Staktube File. These are available complete with 81 steel-rimmed 1-½" ID tubes, expanding to 32 the number of Staktube sizes: 9, 16, 36 and now 81, each in eight different lengths from 18" to 60". The 81 tube size combines maximum space

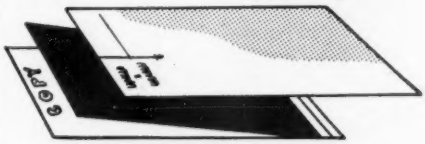


utilization with maximum protection, keeping individual drawings neat, clean and in order, and preventing mutilation from unnecessary handling in use, in transit and in storage. Drawings are located quickly by using the file's outside label and complete index record on the inside of the hinged door. Precision made of heavy gauge steel and finished in hard-baked gray enamel, Staktube files may be stood on end or stacked horizontally to any height. **For More Information Circle No. 166.**

PHOTOCOPY PAPER DISPENSERS

A. B. Dick Co., 5700 W. Touhy Ave., Chicago 48, Ill., offers two photocopy paper dispensers. The deluxe model, a companion to the Model 110 Photocopier, is constructed of heavy gauge steel; has a plastic handle on the stainless dispensing

EXLCO CARBON COPY SETS



TWO WAY SALES PLAN THAT MEANS GREATER PROFIT!

Attractively packaged, top quality carbon second sheets, prompt delivery to your customers under your label.
DEMONSTRATOR kit assures first sale and automatic repeat sales.
Write for Samples and Dealer Plan

EXLCO THE EXLINE-LOWDON COMPANY
1818 S. ERVAY • DALLAS, TEXAS • HA 1-2177

For More Information Circle No. 405

IT'S VISIBLE

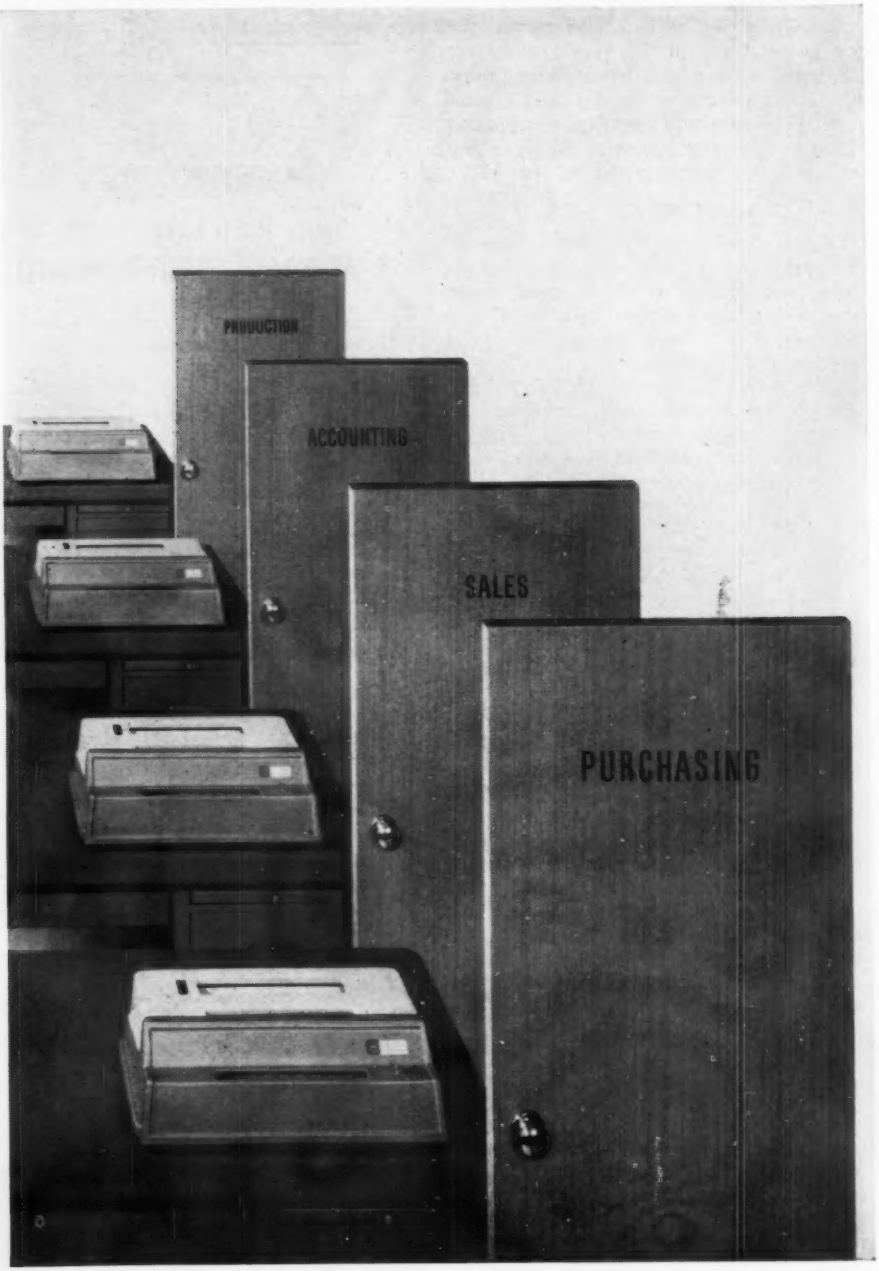
Model 41 — 3 Movement Numbering Machine

WRITE FOR DETAILS

654321
Facsimile Impression

AMERICAN NUMBERING MACHINE CO.
ATLANTIC AND SHEPHERD AVENUES
BROOKLYN 8, NEW YORK
BRANCH—105 W. MADISON ST., CHICAGO 2, ILL.

For More Information Circle No. 406



For More Information Circle No. 315

Now your department can have its own photocopier

for only $99.50!

Manufacturer's suggested retail price subject to change without notice.

Cut paperwork costs in every department with this all-new copying machine. The price is so low it will pay for itself in half the time you would expect!

Put this smooth-working photocopier in purchasing, production, accounting, receiving—*every* department. Eliminate embarrassing errors; step up overall efficiency. Instead of costly, time-consuming typewriting and handwriting, make photo-exact *permanent* photocopies . . . in seconds . . . for pennies!

The Model 101 copies any document—printed, written, drawn, duplicated . . . carbons, 2-sided originals, transparencies, blueprints, photostats, diazo prints. Makes multi-copies. Makes copies on any one of 6 different colored positive papers.

Check the price again—*only $99.50*—then call your A. B. Dick Company distributor (listed in the Yellow Pages) for information or a free demonstration. Or mail the coupon today!

A·B·DICK®
DUPLICATING PRODUCTS

FREE!

☐ Send new brochure "How to save time and get more work done during working hours."

☐ Send literature on new Model 101 Photocopier.

Name_____

Position_____

Company_____

Address_____

City_____ Zone____ State____

A. B. DICK Company,
Dept. O-50
5700 West Touhy Ave.
Chicago 48, Illinois

For More Information Circle No. 315

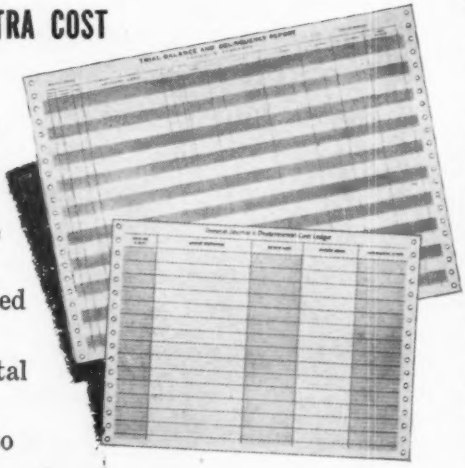
How to Please the Boss . . .

SAVE EXECUTIVE TIME • REDUCE REFERENCE ERRORS • BUY

HANO TAB FORMS

Shaded Columns

Easy Reference AT NO EXTRA COST



When reports go to "The Boss", why not make them error-free, more readable, quick and easy to use for comparisons and figure analysis. Everyone will be pleased. Hano Lithographed Tabulating Forms with shaded vertical or horizontal columns are the answer. They are worth looking into right away.

write for FREE SAMPLE PACKET NO. 131

PHILIP *Hano* COMPANY, INC.

MAIN OFFICE AND FACTORY HOLYOKE, MASSACHUSETTS
Branch Plant MT. OLIVE, ILLINOIS

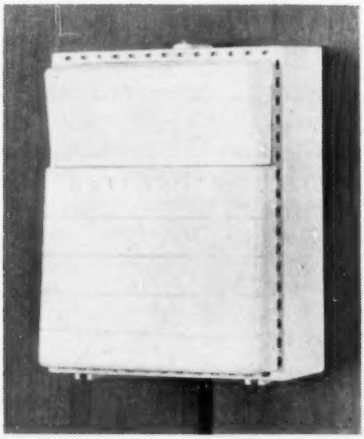
LITHOGRAPHED BUSINESS FORMS SINCE 1888

For More Information Circle No. 253

rod; rubber feet to protect desk top and a hinged cover to facilitate loading of negative paper. The second model is designed to accompany the Model 101 economy departmental photocopier introduced by A. B. Dick recently. Constructed of sturdy steel, this dispenser has a steel dispensing rod; corklike pads to protect desk tops and a lift off cover. Both dispensers are attractively finished in two-tone frost green and beige to match the finish of A. B. Dick Photocopiers. A simple paper backstop, easily inserted into one of two slots, enables both models to accommodate 8½ x 11″ or 8½ x 14″ photocopy papers. A more positive feed is achieved through the use of a soft rubber pad which smoothly dispenses negative papers one sheet at a time. Retainer pads hold the papers firmly within the light-tight box. **For More Information Circle No. 187.**

SAFETY LIGHT

Astronautics Engineering Corp., 500 West 18th St., Hialeah, Fla., has developed a safety light which turns on automatically when electric power fails. Astro-Lite helps prevent accidents, panic or pilfering dur-



ing power failures. It plugs into any electrical outlet and its automatic switch cuts on immediately when the electricity goes off. Made of shatter-proof styrene in four decorator colors, the safety light looks

This girl gets $25 a week more

than this girl.

Because she had the desire for perfection and the wisdom to use

A.W.Faber

ERASERSTIK®

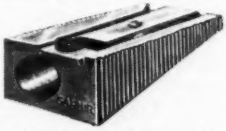
The original grey eraser point —always best for erasing.

—the invention that banished Erasing "Ghosts".

7099B with brush 20c. 7099 without brush 10c. Insist on the original and genuine EraserStik by registered trade mark.

SAPHIR Hand Sharpener

works like magic. Gives you the correct point on your EraserStik—then stops sharpening. If you use one, you need the other. Ask your Stationer.



A.W.Faber-Castell

Pencil Co., Inc., Newark 3, N. J.

Shaped like a pencil, it sharpens like a pencil to any style point you prefer—blunt, medium or slender.

For More Information Circle No. 370

NEW Paper Welder

Fastens Paper Using Nothing But the Paper Itself!

- No Refills
- No Clogged Machines
- No Staples to Remove
- No Bulky Files
- Paper Easily Unlocked, No Tearing
- Welded Papers Lay Flat

It Costs Nothing To Press The Handle

A precision made instrument with handsome chrome finish. It is new, novel, smooth, silent, and efficient in operation. Never needs refilling. It will weld up to six sheets of 16# paper. Modernize your office with this time and money saving office appliance. An ideal gift with name engraved on the handle. If your dealer cannot supply you, write direct. Dealer inquiries invited.

PAPER WELDER, INC. Medina, N. Y.

For More Information Circle No. 449

CALCULATING CHARTS ORIGINATED

PERFECT ACCURACY

8½" x 11" Negative Photostat (350 Answers)

MINIMUM CHARGE $10

Additional Answers—2c each

TYPEWRITER TYPE

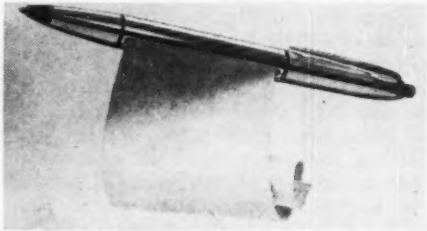
Write **LEO C. SHAW** 12th Floor
53 PARK PLACE, NEW YORK 7, N. Y.

For More Information Circle No. 450

like a small portable radio; measures 6½" x 8" and can be hung on a wall or rested on a table. Retails for $19.95. **For More Information Circle No. 125.**

BALLPEN WITH PAPER

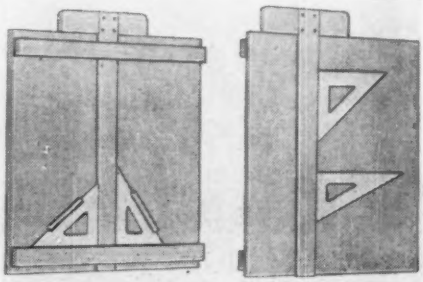
J. L. Bagarry Jr., Dept. 58-9, 2755 Liberty, Beaumont, Texas, introduces a patented West German ballpen that carries its own paper supply. It is made of brass coated with Eloxal gold finish. Paper from



a refillable roll in the barrel rolls out easily when pen is turned, allowing the user to make notes anywhere. The paper also may be used to clean eyeglasses or blot lipstick. This product received the 1958 medallion at the Paris Fair. It costs $3 postpaid. Paper refills are 25c each or six for $1.25. Unconditionally guaranteed. Dealers and distributors solicited. **For More Information Circle No. 150.**

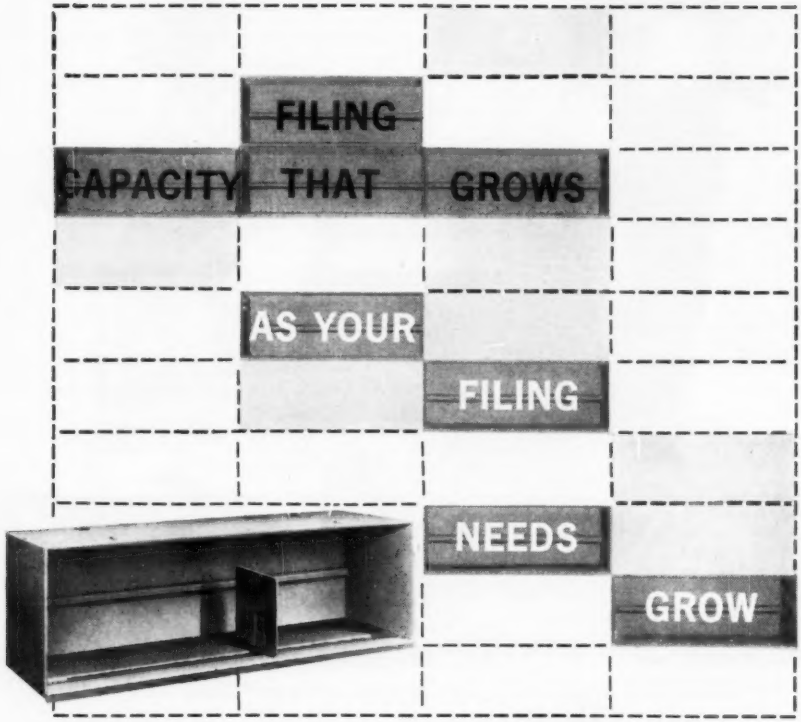
PORTABLE DRAWING KIT

Alvin & Co., 611 Palisado Ave., Windsor, Conn., offers a choice of handy drawing kits in four popular sizes. Compact for



freehand or mechanical drawing. Useful in sketching and temporary layout work for both vocational and technical use. Clear,

DIEBOLD ADD-A-SHELF OPEN SHELF FILING



• Diebold modular design permits expansion of your filing capacity as your needs increase . . . simply by adding Add-A-Shelf units. • Units lock together top-to-bottom, side-to-side, back-to-back! • No tools or additional materials needed. • Add-A-Shelf turns wasted space into storage space . . . can be erected in hallways . . . above doorways . . . used as room dividers.

DIEBOLD
INCORPORATED

DIO-1147

Send coupon for detailed information.
Diebold, Incorporated Dept. OE-124
Canton 2, Ohio

Gentlemen: Please send details on Diebold Add-A-Shelf open shelf filing units.

Name _____
Company _____
Address _____
City _____ Zone____ State_____

For More Information Circle No. 252

Model shown $1,275.
Typewriter extra.

THE BOSS CAN EXPECT TYPING PERFECTION IN MINUTES *and know Auto-typist pays for itself in 4 months*

How would you like to have personally typed letters turned out 2½ times the speed of the fastest typist? neat, erasure-free, error-free? With Auto-typist, one average typist can easily do 100 to 125 letters each day—three or four times her normal typing output.

Your return on initial investment is good. The price of a standard model Auto-typist, as low as $900, is equal to the salary of an average typist for *only four months.* That's economy, even in the short run! Think of your savings!

Operation is simple and foolproof. Precomposed letters, or separate paragraphs, are perforated on a wide tape roll and numbered to correspond with the pushbuttons on the panel. Then Auto-typist automatically picks them out, and types them in correct sequence every time! Write for new Second Edition, "Sixty Best Business Letters" and complete Auto-typist information.

Auto-typist

AMERICAN AUTOMATIC TYPEWRITER COMPANY • 2323 N. PULASKI ROAD, CHICAGO 39, ILLINOIS
MANUFACTURERS OF AUTO-TYPIST, COPY-TYPIST AND CABLE-TYPIST

For More Information Circle No. 372

lightweight basswood drawing board with finished fixed head, maple wood T-square and two transparent triangles (with finger lifts) one 45/90° and the other 30/60°. Built-in T-square holder on back of board holds triangles in place when not in use. Available in sizes 10″ x 12″, $1.85; 13″ x 19″, $2.85; 17″ x 22″, $3.75; 19″ x 25″, $4.95. Each kit is supplied with waterproof, durable plastic envelope jacket. **For More Information Circle No. 140.**

DARKROOM SAFELIGHTS

NuArc Co., 4110 W. Grand Ave., Chicago 51, Ill., makes darkroom safelights in nine sizes for wall, ceiling or table mounting. Special sizes can be made to order. All safelights have a metal body with silver, baked enamel hammerloid finish. Inspection safelights are available in three sizes, and can be supplied with overhead rails and water flow system. They incorporate a Neoprene coated metal trough and frame, and are available with green, ruby or white lights. They can be used for etching halftone negatives as well as inspection of all negatives and positives. Standard safelights with ruby lights are

available in six sizes, and in a variety of shapes. For Bulletin N227-0 describing these units, **Circle No. 112.**

SERIALLY NUMBERED Autographs

Tops in Tags for PROFITABLE PROPERTY CONTROL!

Get these Benefits

- Reduced capital expenditures
- Dependable tax computations
- Verifiable depreciation
- Reliable insurance coverage
- Longer productive life
- Fewer losses and thefts
- Higher trade-ins

There's profit in Property Control, *increased operational efficiency,* when assets are tagged with Serially Numbered "AUTOGRAPHS". Adhesive-backed . . . *no unwieldy tools or awkward fasteners needed.* A cinch to mount in seconds *on any surface.* Attractive and easy-to-read, too. Lustrous .016" Alodized aluminum . . . not a flimsy foil. Try them. Millions in use. There's a reason!

FREE 16-PAGE BOOKLET "How to Plan A Profitable Property Control Program." Write for it.

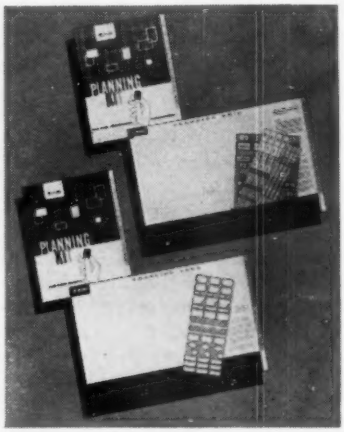
METALcraft INC.
MASON CITY, IOWA

For More Information Circle No. 371

For More Information Circle No. 395

DATA PROCESSING PLAN KIT

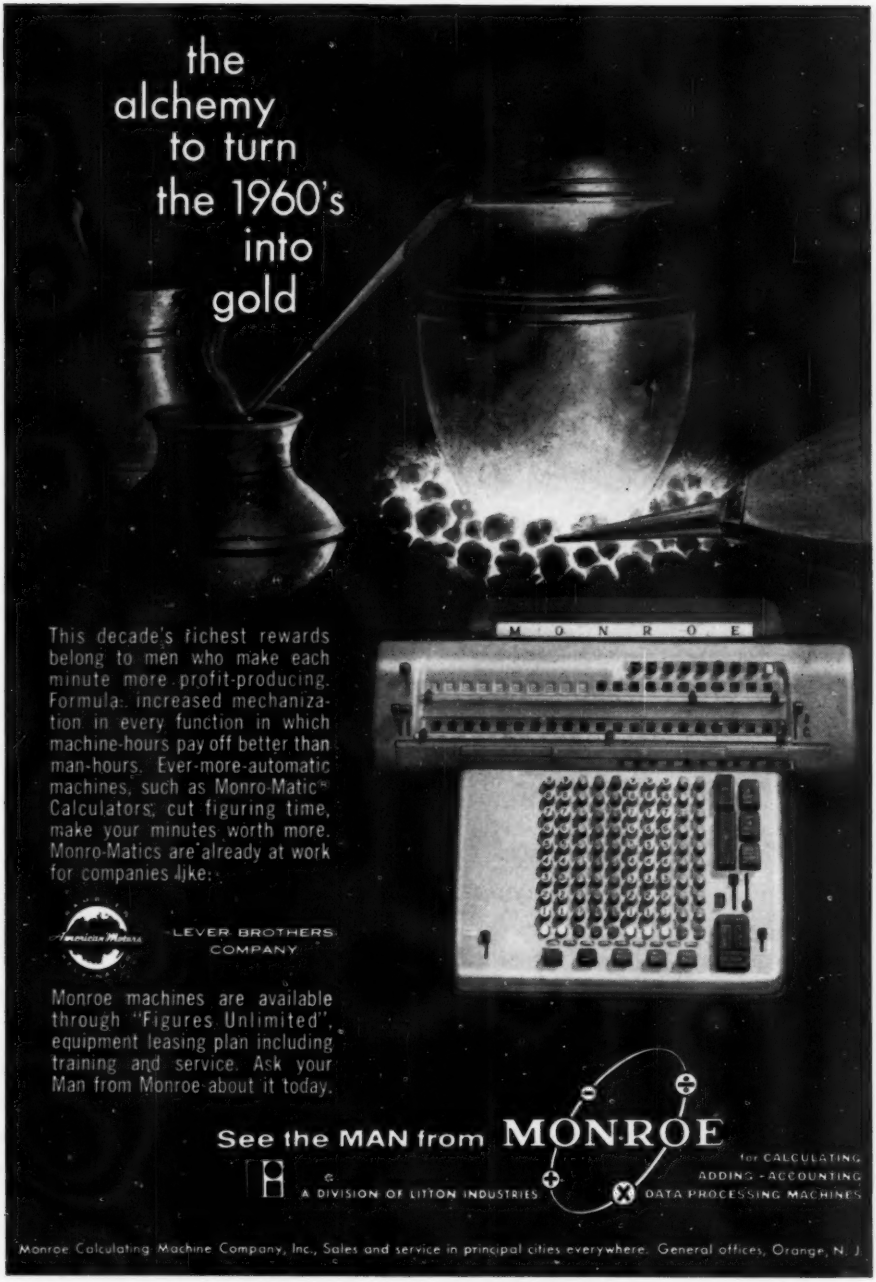
Tab Products Co., 995 Market St., San Francisco 3, Calif., offers a planning kit for data processing departments. It consists of an attractive folder enclosing a scaled planning grid and a complete series of pressure sensitive templates for both data processing machines and auxiliary



equipment. All are to scale. The templates are easy to pick up and put down so that a neat, finished plan is accomplished readily, even with a normal amount of trial and error. It can then be photocopied, Xeroxed or reproduced by other means to circulate copies to management concerned with expansions, rearrangements and new purchases. For this free planning kit, **Circle No. 145.**

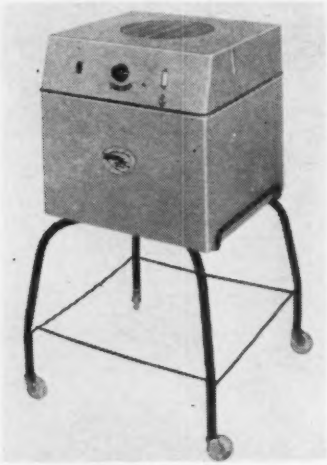
AIR CLEANER

Electro-Air Cleaner Co., Dept. RS, Olivia & Sproul Sts., McKees Rocks, Pa., announces addition of a room size model to its line of electronic air cleaners. The portable, plug-in unit has a built-in, two-speed motorized fan, requires no water or drain connection and can be easily moved from room to room. Air handling capacity is 225 cu. ft. per minute at 90% efficiency by the National Bureau of Standards Dust Spot Test. This means 90% of all airborne particles, as small as 1/100 of a micron, are removed from air passing



For More Information Circle No. 217

through the unit. It is effective in conference rooms, private offices, and other small commercial or industrial building



areas where cigarette smoke and dirt are a problem. **For More Information Circle No. 475.**

CLIPBOARD-BINDER

Arch K. Ansty Co., 171 Second St., San Francisco 5, Calif., offers the Kismet punchless clipboard binder in an elec-

tronically sealed cover of vinyl plastic that is durable and washable. It can be used as a rigid clipboard and filed upright

NEW! All Purpose 14½" PAPER CUTTER
SAFE...ACCURATE...STURDY...EASY TO OPERATE

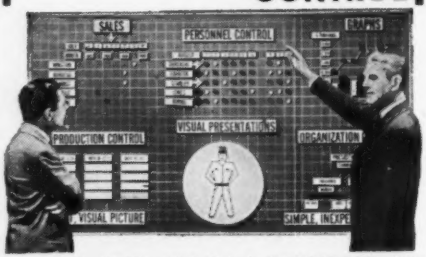
At a Sensational Price
Only $139.50 *List*

ANYONE CAN OPERATE the **NEW HOMS M14 All Purpose 14½" Paper Cutter** easily, accurately and in complete safety. Precision engineered, the Model M14 has features matched only in higher priced cutters . . . such as: automatic safety device, heavy duty paper press, full length side guide, full width adjustable back gauge and two permanent rules so that back guide may be set and locked for any paper size required. **See your dealer TODAY!**

WRITE TODAY for BROCHURES Complete INFORMATION, HOMS Office Products, Department O:
DOUGLAS HOMS CO., INC.
1314 ROLLINS ROAD
BURLINGAME, CALIFORNIA

For More Information Circle No. 379

VISUAL
MAGNETIC
CONTROL



MAGNETS MOVE FASTEST—& EASIEST—OF ALL!

Priced From
$38
INCLUDING MAGNETIC ELEMENTS

Simplest Control for Sales • Production Charts • Personnel Maintenance • Scheduling Machine Loading Visual Presentations
•
COLORFUL MAGNETS ORGANIZE FOR ACTION SHOW FACTS INSTANTLY GET THE JOB DONE

PRICES & BROCHURE OF-5
FREE
ON REQUEST

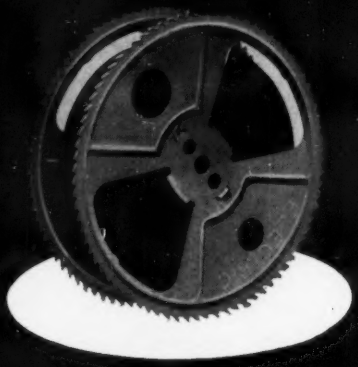
Methods Research Corp.
105 Willow Avenue, Staten Island 5, N. Y.

For More Information Circle No. 378

SUPER

is right!

Finest fabric ribbon made!



Super Kemlon Typewriter Ribbons

Super results...
impressions every bit as sharp and clear as from carbon paper or plastic ribbons!

Super economy...
guaranteed to outlast any other ribbon on the market!

Super fabric...
the toughest, sheerest, most closely woven fabric EVER used for typewriter ribbons!

Super length...
a full 36 yards for IBM—24 yards for all other typewriters!

Super inking...
special chemical treatment of the fabric for highest ink absorption, combined with a special ink formula!

Super selection...
available in two degrees of inking—medium and medium heavy—black, black and red. Also an assortment of other colors—blue, green, brown, lavender. Available in offset inking in black.

Super appeal...
The ribbon sells itself—once you try a Super Kemlon Ribbon you'll never be satisfied with any other!

SEND FOR YOUR TRIAL ORDER TODAY!
Quantity Discounts on Request

FRANKEL
MANUFACTURING CO.

Est. 1906—Manufacturers of World Famous Klean Write Stencils, Typewriter Ribbons, Carbon Paper and Ball Pens.

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FRANKEL MANUFACTURING CO.
285 Rio Grande Blvd. • Denver 23, Colorado

Please send me a trial order of SUPER Kemlon Typewriter ribbons. If I am not completely satisfied, I will return the unused portion of the order and remit no payment.

☐ *36 yds. for IBM, $40 doz.* ☐ *24 yds. ½" ribbon, $28.50 doz.*

COLORS _____

DEGREE OF INKING ☐ Medium, ☐ Medium Heavy ☐ Record ☐ Offset

MAKE OF TYPEWRITER _____

Name _____

Firm Name _____

Address _____

City _____ Zone _____ State _____

For More Information Circle No. 320

Speeds up mailing operations for every one of your customers!

- Takes any paper thickness
- Large water capacity
- Wick roller action
- Perfect for labels, envelopes, stamps

$5.00
slightly higher, west of Rockies

Model "DG" Double Gummed Label Moistener **$6.50**

Model "C" Moistener **$5.00**

Glue-Fast

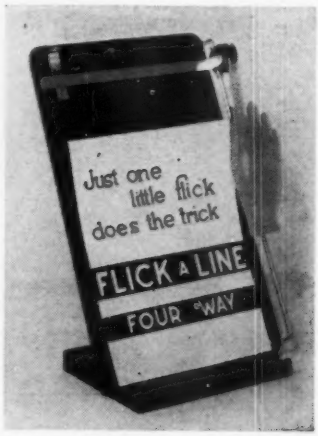
Glue-Fast Equipment Co., Inc.
9-K White Street New York 13, N. Y.

For More Information Circle No. 387

as a binder. The positive spring clip operates with fingertip action and stays open when desired. Corners are rounded and the stiff cover is suitable for labelling or indexing. It also can be imprinted or silk screened for advertising purposes. Holds 200 sheets. Suggested list price is $2.25. **For More Information Circle No. 129.**

COPYHOLDER

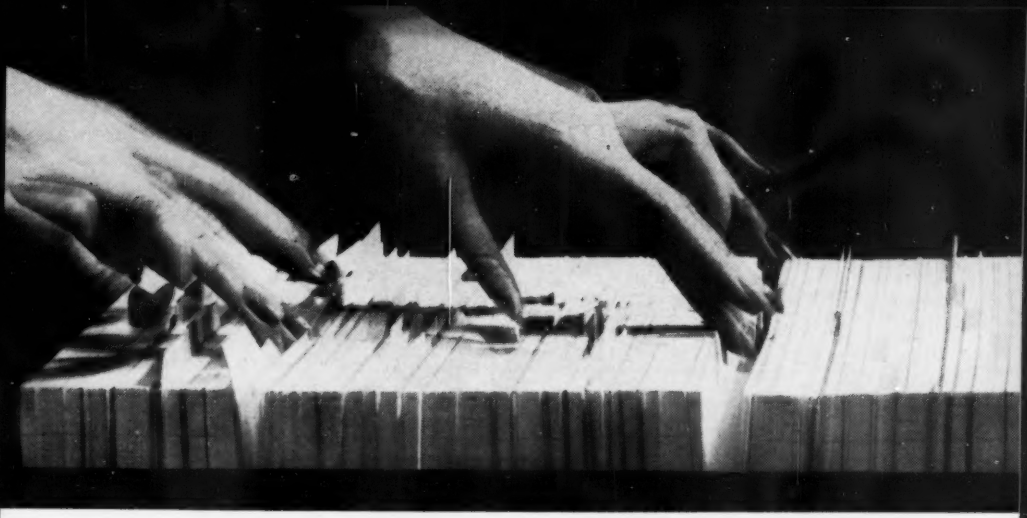
Franklin Table Co., 116 North 4th St., Louisville 2, Ky., announces a new finish for Flick A Line Copyholders. Suggested by one of the country's leading color consultants, soft polytones of gray complement office decor. The Flick A Line panel (8¾" x 14") fits in slotted hardwood base in



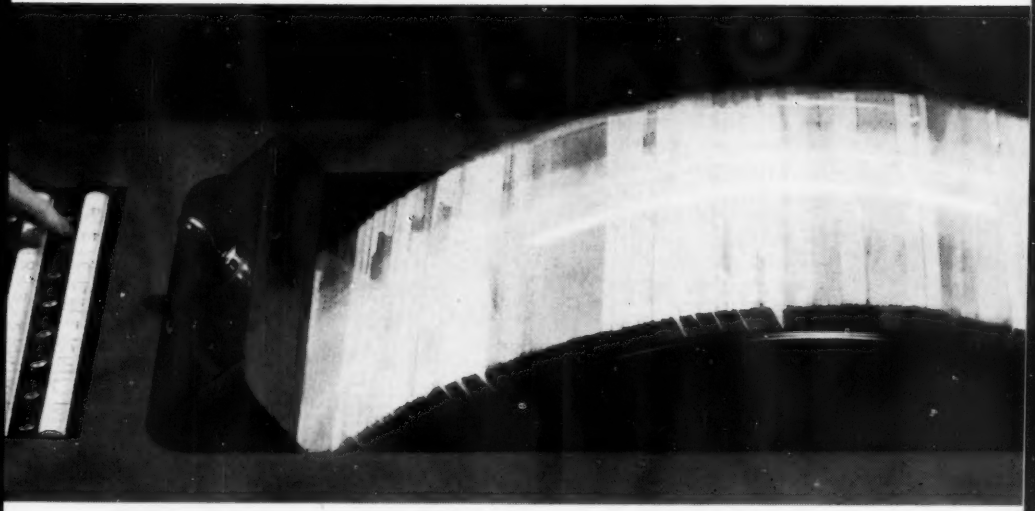
any of four positions: right or left, high or low. Copyholder is described as combining every desirable feature for good copy work. A flick of the finger rolls rubber wheel along track for quick, accurate line spacings. Low, horizontal position is ideal for notebook or dictionary. Copyholder stores flat, retails at $6.50. **For More Information Circle No. 111.**

ANTI-STATIC COMPOUNDS

Merix Chemical Co., 2234 E. 75th St., Chicago 49, Ill., announces its Anti-Static 79 which removes electrostatic charges from metal or plastic surfaces and keeps such surfaces dust free. It cuts mainte-



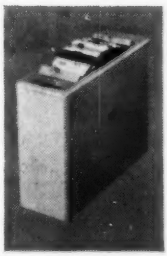
How to give your old cards...



...new *zip!*

Simply *lift* them out of your present tray or drawer files, *drop* them in Revo-File, and watch the card you want *zip* to your fingertips. Revo-File is Mosler's amazing new rotary file that's entirely different from old-style files in capacity (holds up to 6,000 cards), ease of finding and filing (takes 1½ seconds to pull card you want), and mobility. Other models available with capacities up to 700,000 cards.

REVO-FILE SYSTEMS DIV.—THE MOSLER SAFE CO.



Dept. O-560, Revo-File Division,
The Mosler Safe Co.,
320 Fifth Ave., New York 1, N.Y.

Send me information on **MOSLER REVO-FILE**

NAME_____

TITLE_____

COMPANY_____

ADDRESS_____

CITY_____ STATE_____

For More Information Circle No. 254

Like Standing on a Cloud

HYGIENIC
Foot Comfort
MATS and RUNNERS

Fatigue caused by standing on hard floors is eliminated when Hygienic Foot Comfort Mats are used. They offer restful, relaxing support to those who must work standing — quickly pay for themselves with increased efficiency. Available in 8 decorator colors with all edges beveled for safety and appearance.

HERE'S THE SECRET . . .
A beautiful rubber tile flooring bonded to a sponge rubber base provides proper support without being "mushy."

See your OFFICE SUPPLY DEALER
or write to: Flooring Division, Dept. E

THE HYGIENIC DENTAL MANUFACTURING CO.
AKRON 10, OHIO, U.S.A.

For More Information Circle No. 225

nance costs when applied to light fixtures. Anti-Static 79-OL applied to textiles, polyethylene and carpets removes electrostatic charges which cause shocks and attract dust. For free data sheet, **Circle No. 105.**

FOLDING TRASH TRUCK

White Mop Wringer Co., Fultonville, N. Y., makes a utility pick-up truck in two models, one with two fixed wheels on rear, the other with two wheels on rear and swivel castors on front. Smooth pull handle is comfortable to hands and an aid to maneuverability. Truck is designed to facilitate quick and easy collection of

wastepaper, trash, soiled linen, etc. Standard equipment includes detachable 10-oz. white duck bag with large brass grommets and triple sewn French seams to withstand repeated commercial laundering. Optional is an attractive black flame-resistant bag. Truck is made of sturdy steel finished in satin black, and folds flat for easy storage. **For More Information Circle No. 472.**

DESK LAMPS

Acme Lite Products Co., Congers N.Y., makes air-cooled Dualite Reflectors with spring activated arms that respond to the lightest touch to put the light exactly

NO COSTLY SHELVING NEEDED WITH

CONVOY "Chem-Board"*

RIGID, PERMANENT, INEXPENSIVE

record storage FILES

Chem-Board Storage Files are permanent. They cost and weigh about 50% less than steel; cost less than some corrugated paper files. They're shipped assembled, ready for use.

NOW—smooth, staple-free fronts make them suitable even for "front-office" use.

Available in letter, legal, check, deposit slip, tab card and many other sizes.

*CHEM-BOARD IS RIGIDIZED CORRUGATED BOARD PROCESSED TO REMARKABLE STRENGTH.

CONVOY, Inc.
STATION B, BOX 216-H
CANTON 6, OHIO

For More Information Circle No. 383

AMERICA'S AMAZING NEW "SELF-SELLING" CHAIRS!

"Rock-It 88"

"PENDULUM MOTION"

OFFICE CHAIRS

FOR EXTRAORDINARY COMFORT!

• WALL-SAVER FEATURE OPTIONAL
• SPRING STEEL SUSPENSION

LIST PRICE $54.95

WHEN PROSPECTS SIT, THEY'RE SOLD!

RICHCRAFT FURNITURE CORP.
P. O. Box 2353 Tulsa, Oklahoma

For More Information Circle No. 384

Save money and pencil-sharpening time: switch to All-Rite Office Pens!

All-Rite

STARTS FASTER

WRITES CLEANER

LASTS LONGER

COSMOPOLITAN

6½" long, pocket/deck model: Eight ink colors: Blue, red, green, black, turquoise, gold, brown, lavender.

#1460: Utility Pen — Medium line — 39¢ ea.
#F1460: Auditors Pen — Extra fine line — 49¢ ea.

OFFICE-RITER

6¼" long desk model: Four ink colors: Blue, red, green & black. (Barrel color denotes ink color).

#52: Medium Line Pen — 29¢ ea.
#522: Extra Fine Line Pen — 39¢ ea.

Order from your stationer or write to:

ALL-RITE PEN, INC.
HACKENSACK, NEW JERSEY

For More Information Circle No. 394

where needed and remain fixed in position. Lamps offer both fluorescent and incandescent lighting either separately or in combination. Can be fastened to desk or table with extra-wide, double-bolt

clamp. Bolts are removable for surface mounting with screws. Also available with streamlined, weighted die-cast base. Both models available in neutral brown or office gray. **For More Information circle No. 149.**

CARBON PAPER

Kee Lox Mfg. Co., Dept. 106, 10 Kee Lox Place, Rochester 1, N. Y., has adopted a high gloss metallic backing as standard

THE NEW ALL METAL MULTIPLE-TALLY
by DENOMINATOR

It sorts and counts *anything* . . . by product, size, color, style, model #, route #, part #, etc. It's the only tabulator on the market today with improved modern design and construction . . . all metal . . . strong . . . built to take a beating! Much easier to operate!

If you use this mark ~~////~~ in your operation, let us show you how you can save up to 50% in time and get greater accuracy with a low-cost MULTIPLE-TALLY.

Ask for free demonstration. Call BArclay 7-3854, or write Dept. O-63.

The DENOMINATOR COMPANY, Inc.
261 BROADWAY, NEW YORK 7, N. Y.
Manufacturers of Tabulating Machines for over 45 years

For More Information Circle No. 251

WHAT DO THEY HAVE IN COMMON?

COLGATE-PALMOLIVE COMPANY
DUQUESNE BREWING COMPANY

THE ESTERBROOK PEN COMPANY
FEDERAL ELECTRIC CORPORATION

FIRST TRENTON NATIONAL BANK
LIBERTY NATIONAL LIFE INSURANCE COMPANY

MINNEAPOLIS-HONEYWELL REGULATOR COMPANY
CHAS. PFIZER & COMPANY

STEPHEN F. WHITMAN & SONS
OLIN-MATHIESON CHEMICAL CORPORATION

THE ORIGINAL AND ONLY WORKABLE CONTINUOUS TAB CARD WITH MAXIMUM EFFICIENCY

FORMSCARD

Two years ago, we introduced FORMSCARDS, the only continuous tab card with no medial waste strips between cards. Since that time, the companies listed above and hundreds of others among the best known business and industrial firms in the world have become enthusiastic FORMSCARDS users. Here's why:

no medial waste strips between cards
pre-punched as required
tabulate at any speed
separate manually or on any burster
vouchers of any length; side, top or bottom
can be part of a multiple forms set

call, wire or write:

Forms inc

manufacturers of line-hole continuous business forms

WILLOW GROVE, PA. • PHONE: OLdfield 9-4000

Sales representatives in principal cities

For More Information Circle No. 409

for its Dri Kleen, 6 lb. sheet general purpose carbon paper. Aside from its aesthetic value, the coating eliminates, to a large extent, reverse surface stenciling. Dri Kleen is a universal weight carbon paper made in two finishes for a medium or dark impression. It exhibits excellent resistance to wear and offers up to eight copies at one time. Fabricated of desirable special midweight stock instead of the 8 lb. stock normally used. **For More Information Circle No. 147.**

HAND CLEANERS

Wash-up Div., Lensclean, Inc., 135 West 25th St., New York 1, N.Y., offers Wash-Up towelettes for cleaning hands and face without leaving the office. Seventy foil-wrapped towelettes are contained in an attrac-

tive dispenser that can be wall-mounted without screws or nails. The use of Wash-Up towelettes eliminates smudged correspondence due to soiled hands and avoids time lost going to the washroom. The manufacturer's time studies are said to show that this saving in time pays for a dispenser and towelettes in two weeks. Retails for $2.50. For literature and free samples, **Circle No. 133.**

TELEPHONE INDEX & PEN

Memo-Speed Products, Inc., 43 West 27th St., New York 1, N. Y., has designed the Rotary Card Index which takes up

From any Point of View . . . it's

BENTSON

OFFICE FURNITURE

People have different ways of looking at things. But, your office manager, your P. A., your secretary, and you will agree on Bentson! Whether you choose compact modular furniture (above) or any other style, Bentson quality equipment will dress up your business. And, you can be sure it's sharp, clean lines will never go out of date!

BENTSON MFG. CO.

653 Highland Avenue, Aurora, Ill.
TWinoaks 7-9237

For More Information Circle No. 404

Newest, Handiest

HELPER for EVERY OFFICE!

New, Versatile

kleen-stik®

Pressure-Sensitive

2-SIDED ADHESIVE IN TAPE FORM

STICKS ANYTHING... TO ANYTHING!

IT'S HERE—the modern "miracle" adhesive that takes the place of paste, glue, liquid cement, and "overlay" tape! The new KLEEN-STIK 2-SIDED ADHESIVE saves time and work in 1001 everyday jobs . . . forms a permanent, water-resistant bond between any combination of materials.

Giant 108-ft. Roll in Handy Dispenser Pack $1.79

For Every Fastening Job:

• Attaching • Holding • Sealing • Hanging • Mounting • Splicing

√ Adheres Instantly . . . no drying time
√ Neat and Clean . . . no ooze . . . no mess . . . no brushing
√ Applies Quickly and Easily . . . like a tape

TRY KLEEN-STIK 2-SIDED ADHESIVE YOURSELF—Prove that it will do everything we claim . . . and more!

"PROVE-IT-YOURSELF"

TRIAL OFFER! REGULAR $1.79 DISPENSER PACK only **$1.00** WITH THIS **COUPON**

KLEEN-STIK Products, Inc. DEPT. O
7300 W. Wilson Ave. • Chicago 31, Illinois

ENCLOSED IS $1.00 -- *RUSH* DISPENSER PACK

Name_____

Address_____

City_____ State_____

Your Dealer_____

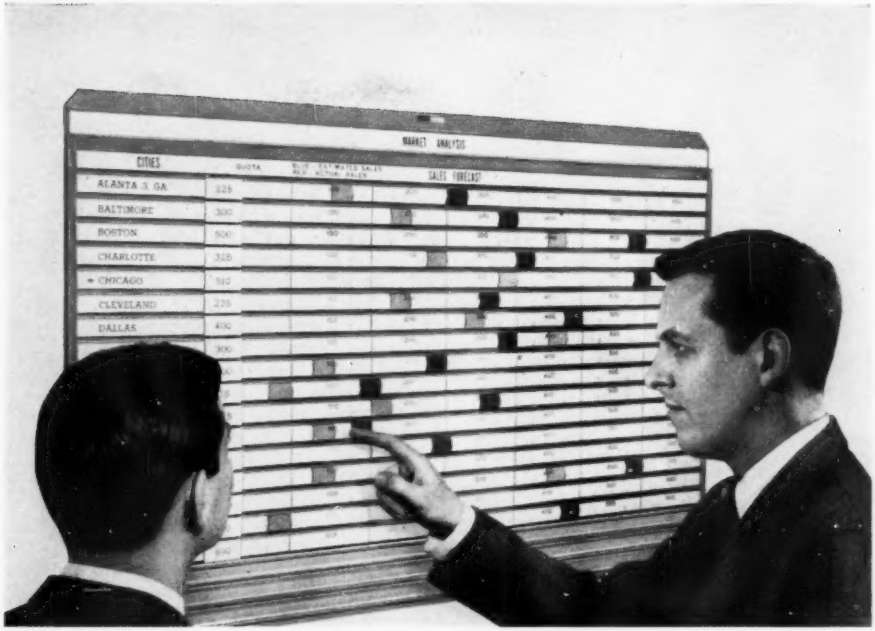
For More Information Circle No. 436

only a couple of inches of space and provides instant access to 300 phone numbers, addresses, notations, etc. Can be placed on desk or table, slipped onto the telephone or hung on the wall. It holds 150 easily viewed 2¾" x 1½" cards; rotates smoothly with convenient side knobs,

and has handy ballpen with holder. Cards can be readily removed or inserted and, when removed, can be filed in Memo-Speed's Pocket Secretary or Desk Reminder to comprise a coordinated system. The Rotary Card Index comes boxed, $1.98 postpaid, with money-back guarantee. **For More Information Circle No. 116.**

CASH REGISTER

Victor Adding Machine Co., 3900 N. Rockwell St., Chicago 18, Ill., makes a service station cash register that accomplishes direct separation of gasoline purchases from other sales. Encompassing cash, charge, received on account, and paid-out transactions, the low cost Model ER 9 (4), will record sales of individual attendants. It has two visible accumulators, one for gasoline income, the other for seven various sources of revenue (according to the individual dealer's requirements). Forgotten cash and charge gas sales can all be detected by a comparison of actual dollar gas sales with pump meter



Quickly chart management action, facts or trends with ACME VISIBLE CONTROL PANELS

Colorful ACME VISIBLE Control Panels adapt to your exact needs . . . save paperwork, step up efficiency, prevent costly oversights. Unlimited signaling and charting possibilities. Snap-on, transparent colored signals flag due dates, reorder levels, quotas, goals. Complete flexibility. Signals smoothly slide entire length of tube . . . override or by-pass others. For more facts, mail coupon today.

ACME VISIBLE

ACME VISIBLE RECORDS, Inc.
2205 West Allview Drive, Crozet, Va.
Please send colorful booklet on new Acme Visible Visual Control Panels and their many uses. I am interested in ____ _____ type of record.

NAME _____ POSITION _____

COMPANY _____

ADDRESS _____

CITY _____ STATE _____ ZONE ____

For More Information Circle No. 397

Says Seymour B. Orner, President, La Salle Casualty Company, Chicago, Ill.

"Like most insurance companies, we constantly have large volume mailings. We found hand folding to be slow, inefficient and very costly at today's wage scale. It kept several of our girls from accomplishing more important work-day tasks.

We purchased a Premier automatic folder which promptly solved our problem. Relieved of monotonous folding, our girls are much happier and our mailings are completed in minimal time."

The Premier Auto-Folder CV automatically Feeds, Folds and Stacks . . . even loads while in operation! Will fold various or uniform sizes including multiple sheets. Accepts a wide range of sizes . . . 2½"x4" to 9½"x15½" in most papers. Safe and easy to use. Folds up to 15,000 pieces per hour. Advanced engineering assures efficient, trouble free operation. Portable, fully guaranteed.

You, too, can save valuable time and attain greater office efficiency.

Write for complete information and name of your nearest dealer.

$149.95
plus F.E.T.

PREMIER AUTO-FOLDER CV

A PRODUCT OF MARTIN YALE, INC., 2100 W. FULTON ST., CHICAGO 12, ILL.

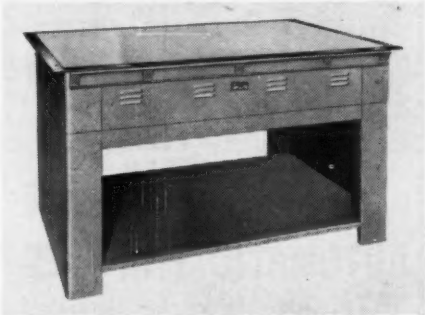
For More Information Circle No. 213

readings. Priced at $415 plus tax, It has a register control lock which prevents tampering with the machine when it is left unattended and an adding charge key

which totals charge sales with cash sales. Paid out transactions are printed in red on the tape so they may be distinguished from cash or charge sales. Operation is manual to enable use either at the gas pump island or inside the station. An electrically operated model is available at slightly higher cost. **For More Information Circle No. 154.**

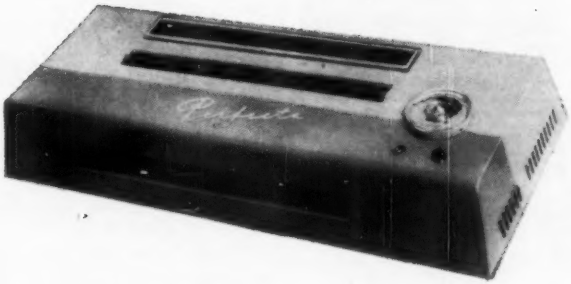
LIGHT TABLE

NuArc Co., 4110 W. Grand Ave., Chicago 51, Ill., has added the LT-51, light table to its line. It has a 36" x 51" working area with highly polished, chromed, machine steel straight edge on all four



LUXACOPY PHOTOCOPYING MACHINES

EB Models guarantee 3-4 copies in 1 minute



Hermann Wolf G.m.b.H., WUPPERTAL-ELBERFELD, WESTERN GERMANY

MANUFACTURER OF MECHANICAL AND OPTICAL APPARATUS

For More Information Circle No. 380

SPEED YOUR TYING

TIE LETTERS, PARCEL POST, CHECKS, BOXES, CIRCULARS, LABELS, PRINTED MATTER AND THOUSANDS OF OTHER ITEMS *10 TIMES FASTER* with an

AUTOMATIC PAK-TYER

Easy to operate and maintain. This speedy **ALL-PURPOSE** tying machine is designed to tie any size or shape package tight without adjustments. The knot is slip proof. Saves time and twine. Several models to choose from.

LET FELINS SOLVE YOUR TYING PROBLEMS. WRITE FOR CIRCULARS NOW.

FELINS TYING MACHINE CO.
3351 N. 35th St.
Milwaukee 16, Wis.

For More Information Circle No. 385

J.F.A.—SOS!

Those records — too important to throw away. We need another Columbia file.

Write for catalog and names of dealers in your area. Columbia-Hallowell Division, SPS, Jenkintown 88, Pa. or SPS Western, Santa Ana, Cal.

For More Information Circle No. 386

sides. The ceramic glass top emits softly diffused fluorescent light. In silver hammerloid baked enamel finish with large steel storage shelf. Tops are easily removable to facilitate moving three doors. Shipped completely set-up, ready to use—no crating charges on any models. The LT-51 is $245. Other nuArc tables run from 18" x 20" to 40" x 60". For bulletin N. 217-0 containing complete details, **Circle No. 189.**

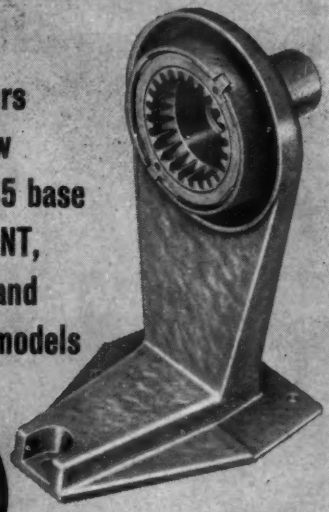
PERSONAL CLEANSING KIT

Instant Valet Corp., Land Title Bldg., Broad & Chestnut Sts., Philadelphia 10, Pa., offers a convenient no-rinse wash-up kit that can be kept in a desk drawer. Called Kwik-Wash, it removes dirt, grease, carbon and cosmetics from hands and face; conditions the skin and prevents chapping. Kwik-Wash is a concentrated liquid formula which requires no rinsing. Scott Towels provide the finishing touch for complete drying and thorough cleansing.

The product has been approved by the Office of Civil & Defense Mobilization for Civil Defense Shelters. Package containing liquid and towels is about the size of a pocket book and slides open like a drawer. An oval cut-out on the front gives a view of the contents and permits easy removal of towels. **For More Information Circle No. 136.**

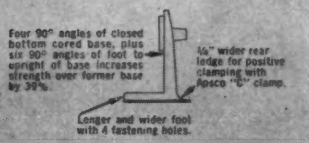
NOW for the FIRST time in any economy model office pencil sharpener ...at no increase in price

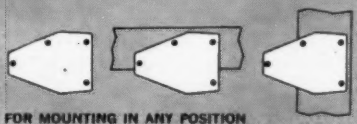
Apsco offers the all-new design #145 base on the GIANT, CHICAGO, and PREMIER models



Apsco

- 3 years of field testing have proven it best by actual use in commercial and school installations
- "Stream" styled in modern motif, Apsco's ALL-NEW base offers greater unequalled overall strength
- A new economy model design featuring the new internal gear cast as an integral part of the base itself
- A new steel receptacle locking ring, staked in six spots to firmly lock the all-steel receptacle in place
- A new ⅜" higher profile eliminates pinched fingers when the sharpener is desk-mounted
- A new, longer and wider foot with 4 mounting holes
- A heavy-duty, upright standard with center-core Zamak #5 casting





FOR MOUNTING IN ANY POSITION

Full gear surface of cutterhead pinion is enveloped by the integral gear teeth, allowing greater mesh area and subsequently less gear wear.

Apsco still supplies these units with top-quality cutterheads featuring under-cut cutters and steel pinion gears.

Send for the NEW free APSCO Catalog

Apsco

THE "GIANT"

THE "PREMIER"

THE "CHICAGO"

APSCO PRODUCTS, INC. Dept. 27-5

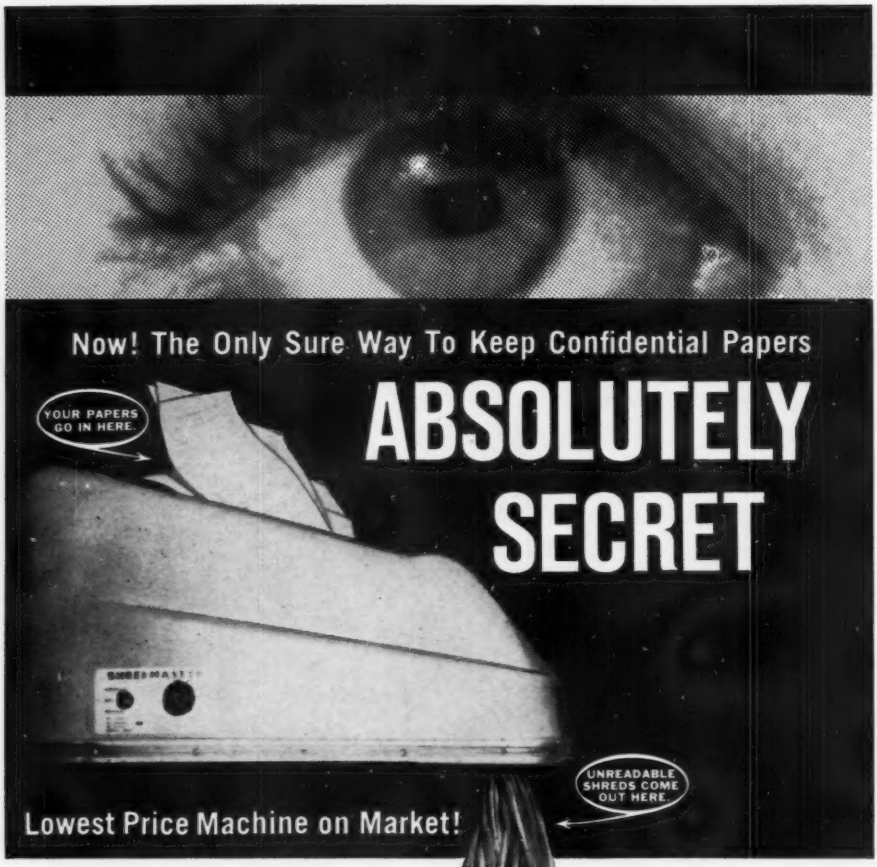
Mailing Address P.O. Box 840, Beverly Hills, California

NAME _____

ADDRESS _____

CITY _____ ZONE _____ STATE _____

For More Information Circle No. 324



No surer, faster or safer way to keep confidential papers secret than by positively destroying them. Do it right in your own office with the new Shredmaster Bantam 10. Anyone can use it. Handsome and modern in design, clean and quiet in operation. Now at a new low price. (Other models of greater capacity available.)

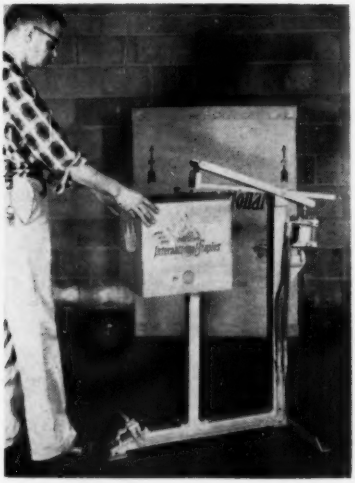
FREE: Illustrated, descriptive folder giving details of free trial. Just write today to DEPT. A-5.

THE SHREDMASTER CORPORATION
384 Woodcleft Ave.
Freeport, N. Y.

For More Information Circle No. 278

CARTON BOTTOM STAPLER

International Staple & Machine Co., Box 270, Herrin, Ill., makes a machine that staples carton bottoms and is air-powered by foot operation. Known as the Bottom Boxer, the unit frees both hands, speeds production and is less fatiguing. It is made to staple a wide variety of carton



sizes and shapes. Throat is 36″ deep and 14″ wide. Overall machine height is 47½″ and weight 70 lbs. The easy-to-change magazine holds 200 staples in three leg sizes: ½″, ⅝″, ¾″. Staples used are said to be stronger than regular bottom wire stitches. For illustrated literature, **Circle No. 462.**

MAIL BOXES

Cutler Mail Chute Co., Box 1819, Rochester 7, N. Y., makes Master Door front access letter boxes suited to cramped space and where access to the letter box is available from only one side. They may be mounted on the surface of any available wall or set in flush with wall surface. Master Doors open wide to give mail clerk ready access to every pigeonhole. Each section comes completely assembled ready for immediate installation. Design and construction are attractive and distinctive, Master Door's crisp functional

smart girl to insist on MECHANO FORM

She knew what her boss wanted — a ledger and index paper with 7 colors plus white, in eight weights for a coordinated office paper system.

Only Mechano Form Ledger and Index has this range and 50% cotton fiber quality. Only Parsons makes it . . . but your printer can get it quickly.

BETTER COTTON FIBER PAPERS

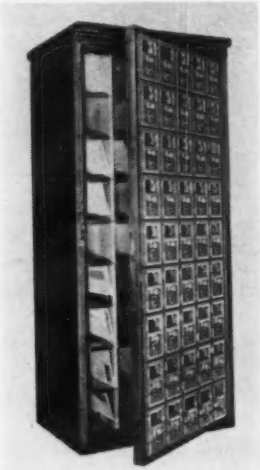
Parsons

KING COTTON BUSINESS PAPERS

YOURS: RECORD-KEEPING PAPER GUIDE NO. 111. WRITE ON YOUR BUSINESS LETTERHEAD TO PARSONS PAPER DIVISION, NATIONAL VULCANIZED FIBRE COMPANY, HOLYOKE, MASSACHUSETTS

For More Information Circle No. 373

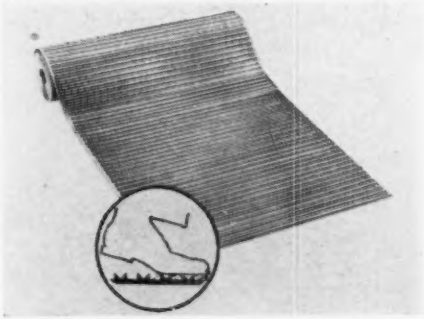
line harmonizing with modern office design. Three mailbox sizes are available. Key or combination locking arrangements



can be furnished including keying matched with other interior and exterior doors. **For More Information Circle No. 471.**

RUBBER RUGS, RUNNERS

Wear Proof Mat Co., 1256 W. Fulton St., Chicago 12, Ill., makes Shad-O-Rugs and Cross-Rib Runners of ¼" live rubber with patented "v" design which scrapes



dirt from shoes. When used in entrances and corridors, they help protect other floors and carpeting from dirt. Shad-O-Rugs and Cross-Rib Runners have anti-slip surfaces and come in red, green, tan, black, white and gray. **For More Information Circle No. 132.**

Recharge your typing with "the printed look"!

CARTER'S ELECTRIC LINE

Fabric Ribbons Carbons Carbon Paper Ribbons

It's custom-designed for hard-hitting electric machines! Just the right inkings — weights and finishes — fabric, paper, film ribbons. Always sparkling results, long range economy. At your stationer or office equipment dealer.

CARTER'S

©THE CARTER'S INK COMPANY, CAMBRIDGE 42, MASS.

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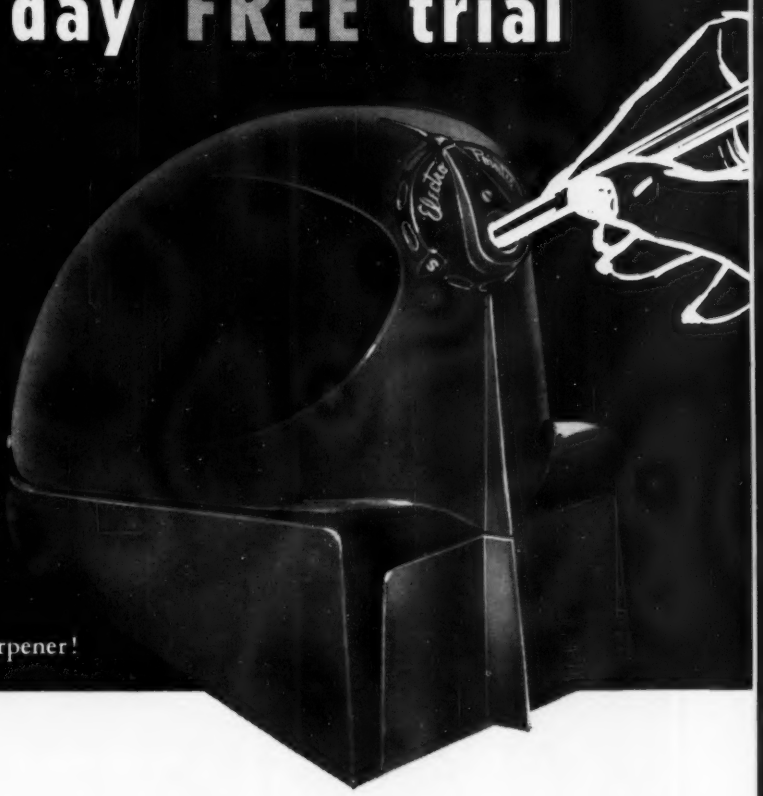
For More Information Circle No. 442

30 day FREE trial



the

ELECTRO POINTER

world's finest
electric pencil sharpener!

Here's a sharpened tip for you that will make a very telling point: the ELECTRO POINTER is the biggest office efficiency innovation since automatic computing machines. If you don't agree, after 30 days, send it back . . . no charge . . . no obligation.

try it . . . and you'll buy it!

STILE-CRAFT

Manufacturers, Inc.

1825 MACKLIND AVE.

ST. LOUIS 10, MO.

For more Information Circle No. 304

STILE-CRAFT Mfrs., Inc.
1825 Macklind St. Louis 10, Mo.

Prove your point! Send me an ELECTRO POINTER for a 30 Day Free Trial. Then, bill me $32.95 plus taxes and shipping, if I decide to keep it.

YOUR NAME_____
FIRM NAME_____
ADDRESS_____
CITY_____ STATE_____

SMEAD
FILING SUPPLIES for MODERN BUSINESS

WHETHER YOU FILE . . . Alphabetically, Numerically, Geographically, Chronologically, or by Subject Indexing, THERE IS A SMEAD SYSTEM ALREADY TAILORED TO FIT YOUR NEED. See your stationer. He will be happy to discuss your problems with you.

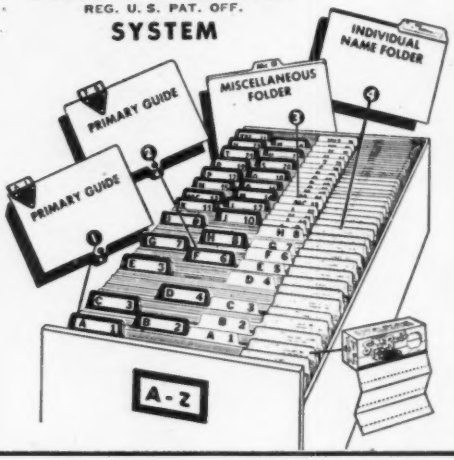
SMEAD TELL-I-VISION INDEX

By using Smead's Tell-I-Vision filing system, you can reduce filing time. The alphabetical-color signal system for finding—and the numerical-color signal system for replacing—make filing easy, fast, and accurate.

SMEAD'S TWO-PLI-TOP FILE FOLDER

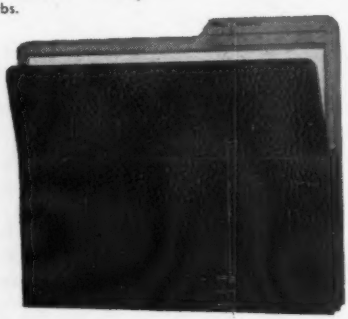
Made doubly thick at the points of greatest wear. Ask for sample.

SMEAD'S
TELL-I-VISION
REG. U. S. PAT. OFF.
SYSTEM



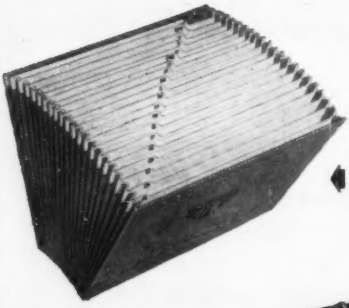
SMEAD'S PROPOSAL COVERS are furnished in many colors and finishes. Also available with open window.

SMEAD'S DESK FILE which is really a correspondence sorter. Available in printed or celluloid tabs.



INDIVIDUAL FILE POCKET

Designed for bulky material. Expansion up to 3½ inches. Ideal for important papers, contracts, etc.



SMEAD'S EXPANDING FILES

Made of leather-like material—long wearing—soil resistant. Made in many sizes with or without flap.

SMEAD'S "ON THE STREET" CARRYING CASE

Perfect for carrying papers in all types of weather. Sheds water—glove-fitted whether partially or fully expanded. Furnished in four sizes.

Smead Manufacturing Company
Hastings, Minnesota

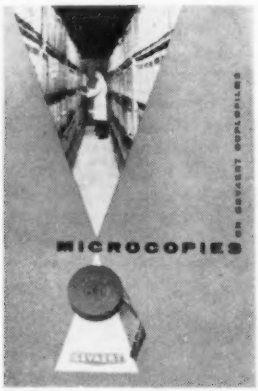
Chicago — Logan, Ohio — Los Angeles

For More Information Circle No. 277

Literature from the Manufacturers

MICROFILM HANDBOOK

Gevaert Co. of America, Inc., 321 West 54th St., New York 19, N.Y., offers a 28-page handbook, "Microcopies," to those who use or produce microfilms. This



booklet defines microfilming and its techniques. There is accurate information on illumination, exposure, filter techniques, and equipment for making and reading microfilms. In addition, the booklet gives valuable suggestions for storage conditions and treatment of processed films. The back of the book contains technical data on processing with time-temperature charts, and sensitometric and characteristic curves. For a free copy of this handy reference booklet, **Circle No. 108.**

FOLDING MACHINES

Challenge Machinery Co., Grand Haven, Mich., covers three improved models of table-type folding machines, designed to provide a low-cost answer to folding needs of many printing plants and duplicator operations, in descriptive literature just issued. These machines can handle single and double parallel folds on sheets up to 17″ x 22″. For this publication F-800, **Circle No. 193.**

INVENTORY CONTROL

Bendix Computer Div., 5630 Arbor Vitae St., Los Angeles 45, Calif., presents a comprehensive study on how the Bendix G-15 Computer helped solve a complex marketing-inventory problem in an illustrated application report, "Inventory Control Program." Starting with the basic problem, the report takes a step-by-step journey from selection of proper computing equipment, to programing, listing the new controls that management has at its disposal, and planning future expansion of this basic computer. For this report No. 10, **Circle No. 175.**

COLOR OFFSET INKS

Van Son Holland Ink Corp. of America, Mineola, N. Y., offers the Van Son Ink Color Book containing 44 pages 5½″ x 7″,

showing 88 different color inks for offset duplicating. The books are available with the inks on either vellum text or offset

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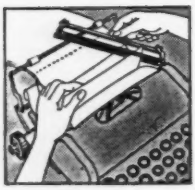

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enamel papers. Each color is shown as a full solid, 50% and 25% tints, as a halftone and in 8-pt. type. The swatches are bound with an aluminum screw post allowing the user to easily fan out the color pages for examination separately or in combinations of colors, making it a valuable aid to owners of offset duplicators. The Van Son color sample book is available from above address or **Circle No. 181.**

MICROFILM SYSTEM

Filmsort Co., Div. Minnesota Mining & Mfg. Co., Dept. FS-2, 900 Bush Ave., St. Paul 6, Minn., offers an eight-page illustrated manual detailing how the Signal Corps, by converting engineering drawings and data to microfilm mounted in aperture cards, has sharply reduced its logistical and filing problems while presenting a means for rapid access to other vital information. This manual, which will be of interest to systems supervisors responsible for speedy filing and recall of data, is entitled: "How the U. S. Army Signal Equipment Support Agency Makes World-Wide Distribution of Micro-Reproduced Engineering Data." For a copy, **Circle No. 195.**

SHIPPING & WAREHOUSING

Manpower, Inc., 820 N. Plankinton Ave., Milwaukee, Wis., offers a report on efficiency in all phases of shipping and warehousing in a booklet, "100 Ways to Save Money in Packing, Shipping, and Stockroom Operations." The brochure contains time and money-saving tips on general administration, packing, shipping, packaging, warehousing and public warehousing. It has pointers on equipment, employee and administrative problems. For a copy, **Circle No. 176.**

HOSPITAL FILING SYSTEM

Deluxe Metal Products Co. Div., Warren, Pa., reveals a method of filing hospital records which saves up to 60% in floorspace in its Bulletin A-3. This system does away with pullout drawers. Called Verti-File, it permits filing twice

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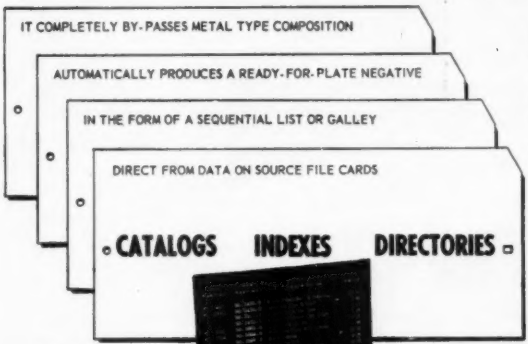

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as much material in the same floor area occupied by a conventional file, and saves two-thirds of the cost of the standard drawer file. Verti-files are available in x-ray, legal and lettersize models with a choice of heights, number of openings, doors and accessories. The bulletin illustrates various models, with complete descriptive material. The advantages of open shelf filing are detailed, and individual accessories are described. For a copy, **Circle No. 172.**

SAME-SIZE CAMERA

M. P. Goodkin Co., 112 Arlington St., Newark 2, N. J., describes its Vertical SS Camera in literature now available. This same-size, portable, desk-top camera is designed specifically for matrix-transfer system such as Gevacopy and Ektalith. It serves equally well in the production of same-size line and halftone negatives up to 11" x 14". For the literature, **Circle No. 173.**

For More Information Circle No. 454

SLOTTED ANGLES

Frontier Mfg. Co., Box 13266, Dallas 20, Texas, offers a catalog of their cold rolled steel slotted angle stock which is made in two sizes: 1½" x 2¼" x .080" (14 ga.) and 1½" x 3" x .104" (12 ga.); 10 and 12 ft. lengths; galvanized or baked-on enamel. This is easy to cut and erect for low-cost shelving, storage racks, platforms, ramps, booths, carts, catwalks, etc. Shelves and other matching parts also are available. The catalog shows the safe loads that can be borne by various angle structures, how they are erected and the different parts available. Patent is pending on Frontier slotted angles. For catalog, **Circle No. 185.**

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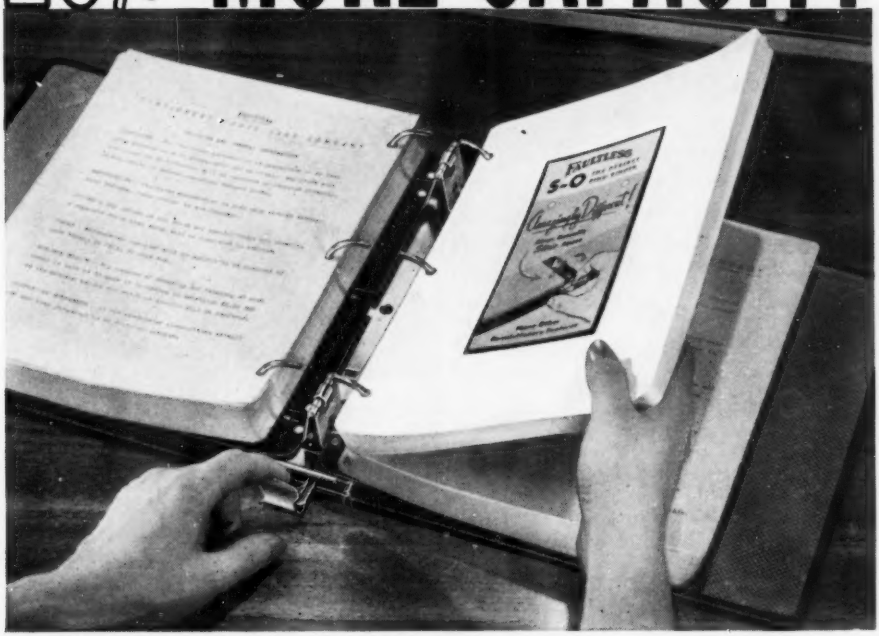

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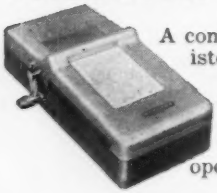

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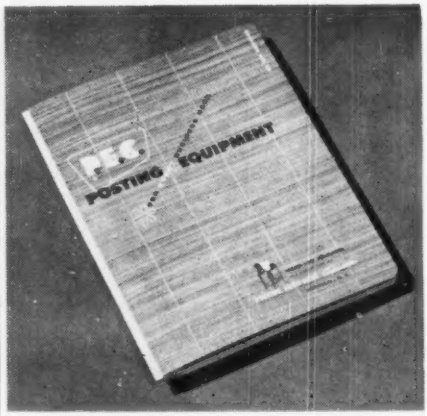
POSTING EQUIPMENT

Mead-Lee Associates, 1721 Elmwood Ave., Buffalo 7, N. Y., offers a colorful catalog of the products of Posting Equipment Corp. The book contains a full description of all the features, sizes, prices



and ordering information on their full line of Matic posting equipment. Also included are two fine English imports and Posting Equipment's new Tilt-O-Rack desk organizer that features quickly adjustable dividers. For a copy of this useful catalong, **Circle No. 478.**

OFFSET DUPLICATORS

American Type Founders Co., 200 Elmora Ave., Elizabeth, N. J., lists complete specifications on all its sheet-fed offset presses in a pocket-size booklet, "ATF Presses—Specifications, 1960." For a free copy, **Circle No. 180.**

DRAFTING FOUNTAIN PEN

Koh-I-Noor Pencil Co., Bloomsbury 10, N. J., offers a 4-page folder describing the Koh-I-Noor Rapidograph line. This non-clogging technical fountain pen has seven individually interchangeable drawing point sections, each complete with its own refillable ink cartridge for either drawing ink, India ink, or Koh-I-Noor acetate ink. The point sections can be interchanged easily in seconds and in complete cleanli-

For More Information Circle No. 412→

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TO CLEAN YOUR TYPEWRITER!

You type the dirt away with new "SCOTCH" BRAND Typewriter Cleaner!

Hands stay clean. This wonderful new cleaner is a *dry sheet*. Just roll it into your typewriter like paper. No messy solvent, no brush, no putty. And no stains or spatters on fingers and clothes! "SCOTCH" BRAND makes typewriter cleaning a "kid glove" job—quick and easy.

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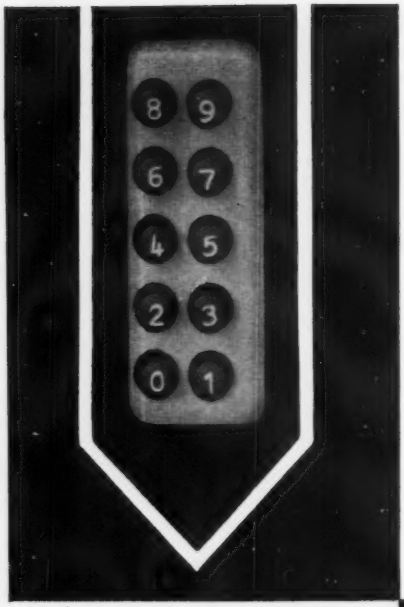

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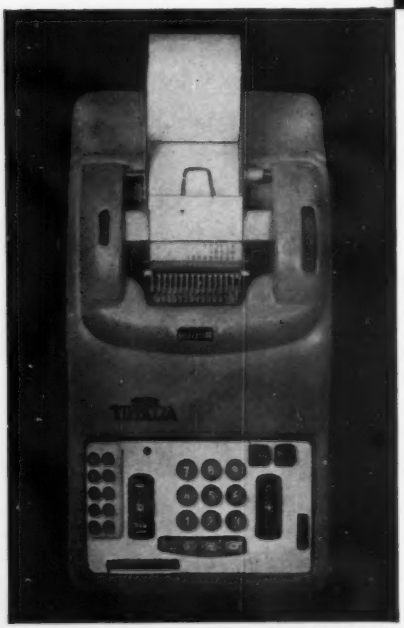

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HOUSTON, Adding Machines Distributing Co., 2223 Caroline St.
DALLAS, Wholesale Office Machines Co., 2000 North Lamar St.
LOUISVILLE, KY., Import Business Machines Co., 1503 Bardstown Road.

CANADA distributor: Nauta Bros., 3615 Danforth Ave., Toronto.

For More Information Circle No. 270

ness to provide seven line widths. The Rapidograph comes in a handy boxed set that holds the barrel and seven color-coded point sections. For the folder, **Circle No. 179.**

INTERCOM SYSTEMS

Dictograph Products, Inc., 95-25 149th St., Jamaica 35, N. Y., shows how substantial saving can be effected through planned use of internal communications, in a booklet, "11 Hidden Losses In Your Business." Dictograph, which has had 50 years experience in engineering intercom systems, describes 11 basic situations which can cost companies thousands of dollars each year as well as the goodwill of their customers and suppliers. The booklet shows the role internal communication systems play in eliminating costly return telephone calls, improving customer relations, eliminating absenteeism, cutting down mistakes, maintaining privacy, etc. For a copy, **Circle No. 178.**

PORTABLE DICTATING MACHINE

Comptometer Corp., 5600 Jarvis Ave., Chicago 48, Ill., offers a two-color bulletin that describes the "triple purpose" Coronet portable dictation-transcription machine. Illustrations point out speed and ease of operation with all controls on microphone. This compact 4½ lb. machine may be used for portable or desk dictation in the office, portable dictation in the field and transcription in the office. The fully transistorized unit operates on battery or plugs into any AC outlet. For this Bulletin 4071, **Circle No. 184.**

DATA PROCESSING EQUIPMENT

Monarch Metal Products, Inc., MacArthur Ave., New Windsor (Newburgh), N. Y., offers a 32-page, illustrated, two-color supplement and a revised price list. The supplement describes a line of full suspension files recently introduced. Among other data processing equipment

MILLER-TROJAN photo equipment
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New SUN DIAL printer gives you complete plate making facilities FOR LESS THAN $100!

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For More Information Circle No. 408

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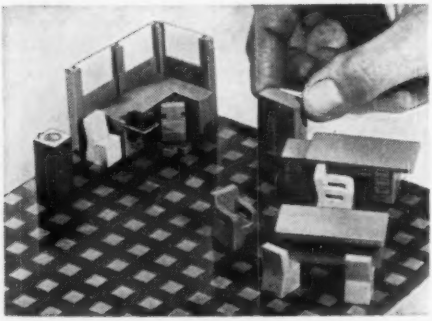

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For More Information Circle No. 438

offered are re-designed tub files, a new line of heavy duty and all purpose trucks, reel storage cabinets, etc. The price list covers both Monarch Catalog No. 4 and the supplement. For copies of both, **Circle No. 177.**

DUPLICATING PUNCH

Royal McBee Corp., Port Chester, N. Y., has released a style sheet (S-550) on its Keysort Dupli Punch. Illustrations include sequence operational photos. It describes the Dupli Punch as a portable, economical point-of-activity device for reproducing fixed punched data from a master Keycard to Keysort cards or sets. Time is saved in ticket creation and coding through eliminating pre-grooving of fixed data. Accuracy of coded information is assured, since cards are notched automatically from the Keycard. Also changes in routines are possible without briefing production or accounting personnel. The Dupli Punch is non-electrical and needs no maintenance service. It is light and portable, and can be located wherever convenience and efficiency indicate. For the style sheet, **Circle No. 479.**

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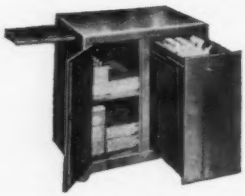

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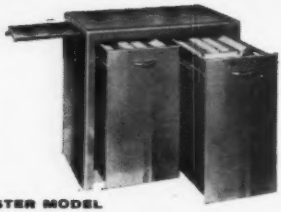

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For More Information Circle No. 456

Mental Illness

(Continued from page 182)

cause you as much pain in the same place that putting this car together has caused me."

We have problem types in the ranks of management, too, such as the sadistic supervisor. Not long ago, I talked with a woman who said with pride that she ruled the girls in her department with an iron hand. She brought one of them in front of me and said to me, "I wouldn't hang my coat next to hers, it's so lousy. Her old man is nothing but a peddler." This is a public exhibition of sadism and is, justifiably, one of the reasons why employees join unions.

Another problem individual is the indecisive supervisor or executive who can't make a decision; who can't even say yes or no. For example, we had occasion to ask a regional sales manager to appraise the qualifications of one of his subordinates. When asked, "How industrious is this subordinate?" he answered, "Well, he isn't really too industrious, but that wouldn't be fair to him. I shouldn't say that. Of course, on the other hand, I've got the management responsibility." This went on for four hours. He never was able to come up with a categorical statement that the man was good, average or poor.

Probably the most pathetic and, I think, the most serious mental condition is the senile executive. I mean the brain-damaged man who, because of age or some problem, develops the evidences of senility. This is extremely difficult to recognize right away because

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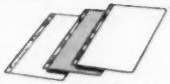

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How to:

ORGANIZE, 'SELL' OPERATE and MAINTAIN A FORMS CONTROL PROGRAM

RAY MARIEN, Forms & Procedures Mgr., Olin Mathieson Chemical Corp., New York.

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usually he remembers all that he his learned and can carry on familiar routines. Though the onset is gradual, the result can be chaotic. The executive showing signs of senility can't learn new things very well, his memory may be poor, and he's likely to become upset quite easily. Here is an example:

The owner of a company I worked with doesn't believe in retirement. The executive vice president is 79 years old and in an advanced state of senility. He gets himself in a state of panic, calls in subordinates and tells them a study of some sort has to be made. The men put in overtime, work Saturdays and Sundays to get the report done. When it is finished and laid on his desk, he forgets he asked for it.

Finally, there is the individual who technically is not ill mentally, but who can stir up quite a bit of trouble. This is the brilliant engineer or research man or scientist who has strong leftist leanings. He organizes the antimanagement groups within the organization and, because he's so brilliant, he frequently is an effective apologist for leftist groups.

The problems of mental health contribute to high labor turnover, excessive absenteeism, and certainly have an adverse effect on morale. The maladjusted employee is frequently a chronic job-changer. He may be brilliant and have all sorts of technical training and experience, but he's never able to reach the goal that his qualifications merit. Chronic job tensions and frictions lead to alcoholism, overeating, oversmoking —all manifestations of the individual who isn't too well adjusted.

Conservatively a tenth, and probably more accurately a fifth, of all employees

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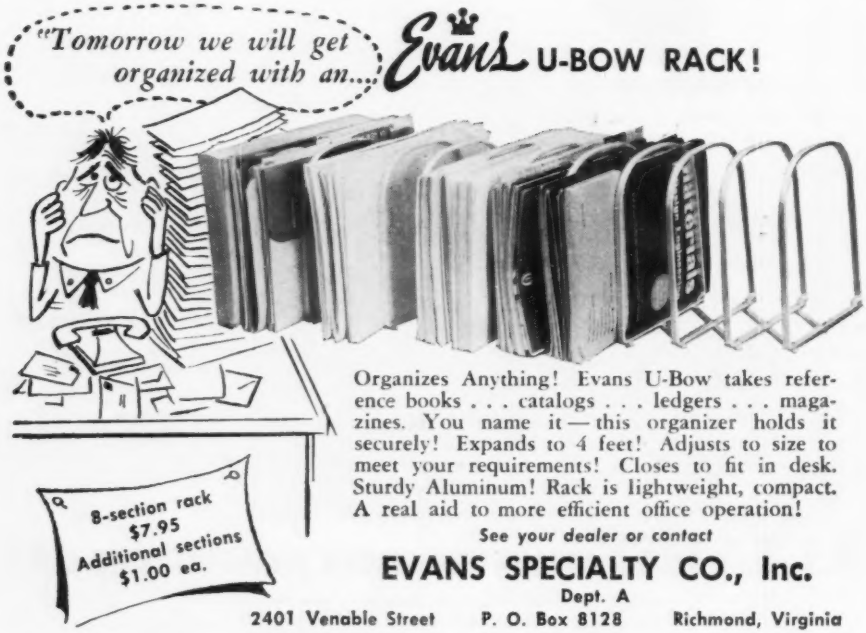
For More Information Circle No. 427

will to some extent be victims of mental disorder, mental deterioration such as senility or mental deficit of some sort. Most people are pretty resistive to change. It isn't easy to convince a person who has delusions of persecution that he isn't being persecuted. Psychiatrists may disagree but our experience is that the unaided individual is not able to accomplish much in bringing about changes in his personality, motivation or his general make-up. He has to have outside help.

Another point in our experience is that logic is not very effective in influencing people. Of course, if your arguments rationalize something that the individual wants to do, your logic will be effective. But when you try to make a change, in our experience, logic is not very effective.

One thing which management seems unaware of is that there is no relationship between intelligence and judgment. A person can be very brilliant and have extremely bad judgment. If you were to go to any mental hospital and administer intelligence tests to the patients, a substantial number would score very high. But they are so out of touch with reality and so badly adjusted that they have to be institutionalized. The more intelligent a person is, the more adept he is at rationalizing his behavior.

The majority of persons attracted to large, successful, secure businesses, we believe, are people with a strong need for security, certainty and a predictable future. People who have the entrepreneurial instinct go into business for themselves or sell intangibles. Understanding these motives is important



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Dept. A

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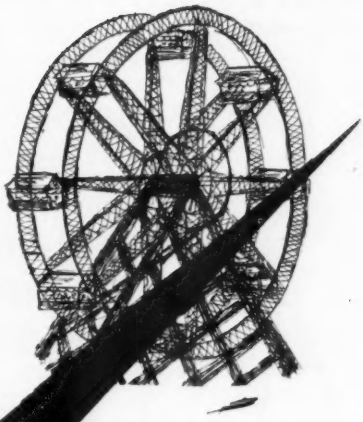
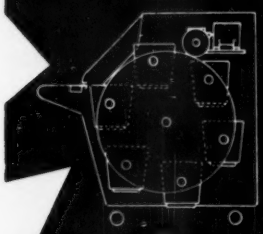


and the result is the remarkable new ROL-STAR filing unit. This rotary cabinet will file maximum cards in a minimum of space. The ROL-STAR comes in capacities of 5000 to 60 000 documents. It can handle any size card. It will immediately handle your present cards without change. An ingenious arrangement keeps the trays always in horizontal position. The ROL-STAR is provided with an electric motor and a reverse gear.



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because, if the employer is not in a position to provide this security, the employee may find himself in a state of anxiety or uncertainty, which in turn can lead to the exacerbation of any latent mental condition.

In most businesses, personnel are not all alike. We distinguish four rather distinct categories, each with a distinctive personality. First, there are the entrepreneurs, one or two at the top of the organization who establish policy, are the initiators of company business and, most important, take the risks. Next is the administrative level where policy is carried out within a relatively structured environment. The next level is the middle management group, technicians and supervisors who translate policies into day-to-day activity. Finally, there are the clerical, factory, and sales people.

Success at one level unfortunately does not guarantee success at another. Management makes its most serious mistake in promoting people over their heads where the individual is likely to be subjected to anxieties and feelings of insecurity which can have serious influences on his behavior. A substantial proportion of those who succumb to alcoholism or develop various psychogenic disorders such as ulcers, hypertension or allergies, are the responsibility of a management that assumes an individual who is competent at one level is necessarily qualified for the level above; or because he is technically qualified, he is equally qualified to make decisions, take risks and exercise leadership.

Management has a responsibility to watch out for the employee from his

initial employment. Most companies give examinations to exclude certain physically handicapped. A careful interviewing and testing program will eliminate many actual or incipient mental cases.

Finally, it is management's obligation to be sure that every incumbent matches his job. There are tremendous differences in job requirements, not only technical but in decision making, risks taken and leadership required. Management should periodically inventory all personnel. Our experience in the many studies we have conducted is that roughly 5% of employees are overqualified for their jobs and should be promoted. About 40% are reasonably well qualified. The remaining 55% are to some degree unqualified for the

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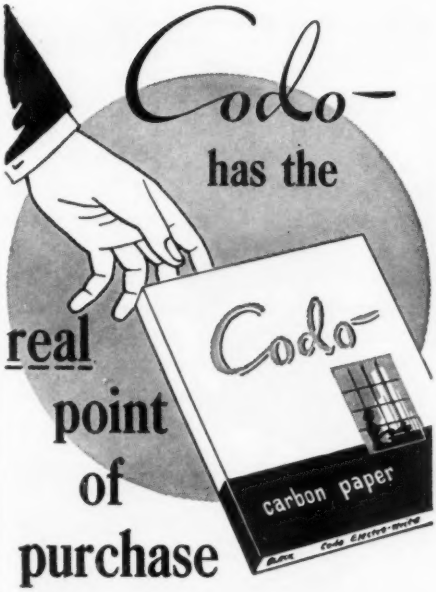
assignments which they have.

For two reasons a high percentage of people get little opportunity for self-realization in their jobs. First, in spite of all their training in human relations, supervisors generally do not give employees adequate recognition. Secondly, though in management there are opportunities for self-realization, when we get down to the clerical level there is little recognition for work well done.

For its own self-interest, to say nothing about the welfare of the individual, management should be constantly aware of the problem of mental illness: at the time of employment, at the time of promotion and periodically on an auditing basis. Beyond that, management must give well adjusted personnel maximum opportunity for self-realization and recognition to insure they are working under reasonably hygienic psychological conditions. Perhaps this problem will never be completely solved by anyone, but I have outlined some of the high spots.—*From a paper presented to the Forum on Mental Health in Business and Industry sponsored by the Connecticut Mutual Life Insurance Co., Hartford.*

For More Information Circle No. 459



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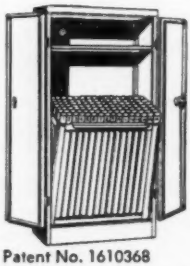
How a Foreign Controls His

CAN YOU get parts for it? This question has plagued the import automobile business since the first foreign-built unit was brought to this country following World War II. Until a few years ago it was well warranted. Outlets for imports in the early days were few and facilities for parts and service were fewer. Fortunately, importers have come to realize that if they are to remain competitive and make repeat sales, they have to provide dependable, well equipped facilities for parts and service.

Our method of controlling parts inventories in the U. S. is similar to that used at our factory in England and by Triumph distributors throughout Europe — a visible-vertical filing system. We have 11 U. S. distributors, each of which maintains a major parts warehouse and supplies parts to a network of dealers in his territory. Inventories range from $10,000 to $300,000. We



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For More Information Circle No. 423

Automobile Importer Inventory of Parts

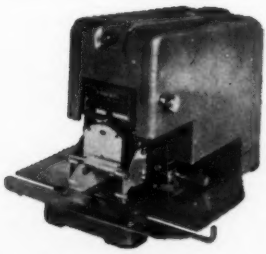
D. PETER SNOW, Vice President—Service, Standard-Triumph Motor Co., New York

feel this gives infinitely greater overall parts coverage throughout the U. S. than if we were to have one major parts warehouse in New York, supplemented by nine minor warehouses.

However, this system does have some inherent problems, such as insuring that our distributors keep a sufficient number of parts on hand. Requirements on the amount of parts stocked by dealers are flexible, depending on each individual dealer's capacity. However, it is up to the distributor to evaluate the dealer's needs. By the same token, it is our responsibility to keep an eye on the overall parts situation. We believe that the best way to do this is to have every distributor use the same method of inventory control. While we do not dictate office procedures to the distributors (each is an independent business), we did design a parts inventory control system and offer it as a suggestion.

We chose a visible-vertical filing system made by Visirecord, Inc., and rec-

The new
ROBERTS E-77
for precise
ELECTRIC NUMBERING



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The Roberts E-77 heavy duty electric numbering machine is a highly versatile general purpose unit designed to number through carbons with exact positioning of the number through adjustable left, right and rear work guides. Instant choice of consecutive, duplicate and repeat. Eight styles of numbering heads to choose from, with figures up to king size 5/16 in. Die plate offers 1¾ sq. in. of message space. Throat depth six inches, automatic cutout protects solenoid, plastic front safety guard, reversible rubber platen, choice of hand or foot operation. No installation, just plug in. Roberts numbering machines have been famous since 1889. Write Roberts Numbering Machine Division, Heller Roberts Manufacturing Corp., 700 Jamaica Ave., Brooklyn 8, N. Y.

For More Information Circle No. 415

Parts supervisor S. J. McErlain (standing) and the author check factory manual to determine a part's interchangeability which will be recorded on inventory card.

ommended by our factory (in England), to be best suited to our needs. The system had to find ready acceptance among our nine distributors, which meant it had to be low in initial cost to the distributor. It had to be easy enough to use so that one posting clerk could maintain it. Also required were compactness, mobility and simplicity to keep the chance of error to a minimum.

Basically, our system consists of corner-cut filing cards which straddle metal spacing rods in a metal tub file. The rods provide an automatic offset so that two edges of each record are always visible. This means that a particular part can be located in the file by merely flipping it open at the proper divider. All parts are filed by number, with file dividers bearing key numbers. With this system, the first card handled

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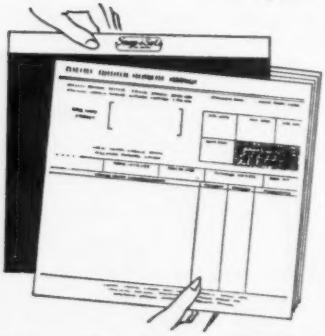

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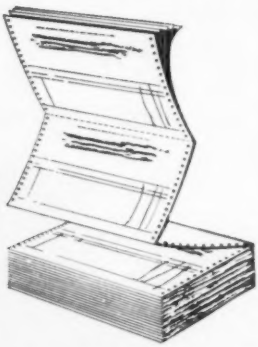

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For More Information Circle No. 439

is the one that is wanted—no other card need be touched.

Unlike parts departments for American automobiles, approximately 95% of our parts inventory is current. The majority of the parts on the current TR-3 sports car are the same as those found on, say, the 1955 model. This is true also of our sedans and station wagons. While this simplifies the situation in one respect, we have another problem that makes inventory control a critical item: due to the time it takes to receive parts from England, stocks must be watched closely and needs projected several months ahead.

Therefore, in addition to the systems maintained by the distributors, our office in New York maintains a master order control, also on Visirecord equipment. All distributor orders come to the main office. They are recorded on the file cards, consolidated and forwarded to the factory. Factory invoices on shipped orders also come through our office.

A distributor's parts file contains a

Each part ordered by a dealer is checked against the distributor's inventory record for availability.

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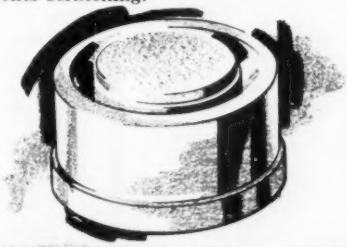

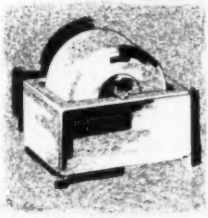

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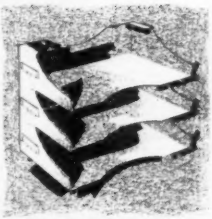

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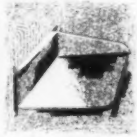

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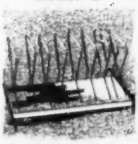

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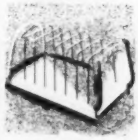

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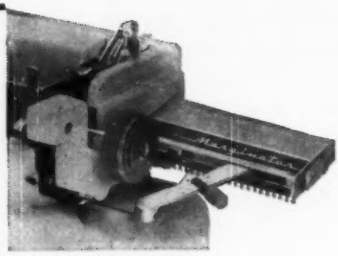

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card for each part, marked to show instances of interchangability. This information is supplied by the factory branch to help distributors reduce the stock they have to keep on hand.

On the face of our cards, there is the part number, name, warehouse bin location, category, dealer orders and stock on hand, order point and usage history. The back of the card records orders placed with the factory and dealer backorder information. Should a part become short, the item card is flipped over and returned to the file. The visible margins on each side are of different colors so that it requires only a glance through the file to note what items are backordered. Information as to stock on hand is recorded in the visible margin on the face of the card, together with the order point. This facilitates periodic checks to determine parts in low supply which should be reordered. When a card is pulled from the file for any purpose, it exposes an "out" marker on the card behind it, which automatically speeds refiling of item cards and provides a positive con-

Distributor can scan his inventory file and quickly pull item cards which indicate that reordering is advisable.

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trol against the loss of a card.

When a distributor receives a parts order from a dealer, the order is checked against the parts inventory. If the part is in stock, the order is subtracted from the on-hand figure and the new balance entered along the visible margin. The bin number is taken from the item card and entered on the order to assist the warehouse in filling the order. The item card is then dropped back into its proper slot. This operation is facilitated by the fact that the file remains open at a 40° angle during posting. All cards in the section are visible and there is no effort wasted in searching the correct file position for the in-use card.

Should the distributor be out of the part, he lists the order on the back-order side of the item card, and he checks to see when the part was ordered. Thus, the system allows him to give the dealer (and car owner) a fairly accurate report as to when the part can be expected. If it is a critical part—something a vehicle can not operate without—the distributor contacts us so that we can check our master control and advise what other distributor has it. Given the part number, a clerk can

Triumph distributors' system gets parts shipped to dealers faster.

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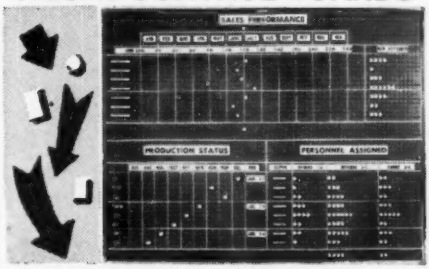

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THE FIRST TIME I USED ROGERSNAP CARBON SECOND SHEETS IN THE NEW *FLIP-OUT DISPENSER BOX!

They changed me from an average secretary to one of the best ... and my work is easier than ever before. If you ask your stationer for a copy of the Comparative Cost Analysis, it will show you why. Tests prove that by eliminating waste motion, Rogersnap saves time and money and increases efficiency.

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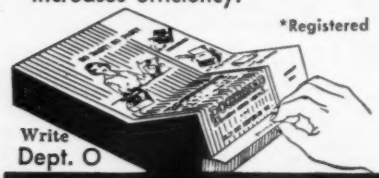

Write Dept. O

ROGERSNAP TRADEMARK ®

P. O. BOX 10425 · DALLAS, TEXAS

For More Information Circle No. 441

glance at our file and provide an answer in three seconds.

When a distributor is ready to reorder a part, he can scan the entire parts file, note items in short supply and pull the item cards. Actual ordering is then only a matter of typing up an order from the complete information on the item card.

Since the item card normally covers parts activity over a period of several years, this record becomes invaluable in projecting his needs. In most parts of the U. S., seasonal climate changes affect the situation. Snow and ice take a big toll in fenders and bumpers, while summer weather and high speed driving affect engine parts and running gear. With a complete parts history within arm's reach, a distributor can tell months in advance what to expect.

The file allows us to make quick checks on the status of various parts. We can advise the factory of trends in parts ordering. This in itself is beneficial since manufacturing procedures in England differ from those here. For example, there is only one manufacturer of roadster windshield frames in England. If an auto maker wants additional units, he must get his order in well in advance. It often is very diffi-

Dependable parts and service must back up the sale of every car.

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FIRE PROTECTION at point of use.

Special Features: New Keylocking "T" handle with 2-point locking. Drawer extends 29½" clear of cabinet on extra heavy duty suspensions. Write for complete information and prices.

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Exclusive Territories Open!

Be the Scotty distributor in your area. Make the extra profit.

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Medium Point 39c Fine 49c Broad 59c

Eight Brilliant Colors and Repro Inks

Every Pen is guaranteed perfect

Special prices for bids

Double your net profit with SCOTTY Pens and standard refills • Bulk and single pack

Write for catalogue sheets and discount on other styles of pens and desk sets.

SCOTTY ENGINEERING CO.

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COPY HOLDER & LINE SPACER

$17.67 Tax Incl.

- Line guide extends to 17"
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Companion *Cop-e-Ett* with manual line indicator $7.95

Slightly higher in the West

SOLD AT DEALERS EVERYWHERE

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R. FUNK & CO, INC.

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Ambi-dex Excites New Thinking

Basic 6-color, 8-oz. package **Ambi-dex Color-Cues** custom-builds from 25 to 6000 index divisions on your folders, without guides, without repetition. For Drawer, Desk, Shelf, Briefcase, Catalogs, Drawings, Envelopes, etc. Alphabetical, Numerical, Subjective, Month, Day, Hour, Minutes, — ALL with versatile **Ambi-dex Color-Cues.**

One Ambi-dex Color-Cue Controls 5 Facts at one time—while it controls errors—finds fast IN or OUT of file—boosts morale—keeps current.

With Ambi-dex You Build As You Grow— Change As You Go—Re-use Color-Cues and folders in new ways—No Obsolescence with **Ambi-dex**—the BRIGHT EYES in FILING and FINDING.

Your Ambi-dex Systems Research Agency Helps You EXPLORE to do MORE in the 60's —with less space, in less time! Request address of nearest Agency. You will receive, by mail, free copy of

SYSTEM 60

Write

Ambi-dex Sales Company

821 Woodlawn Dr. DeKalb, Illinois

For More Information Circle No. 424

cult for Europeans to visualize the driving conditions in this country. It takes some firm language at times to convince our factory that Americans really do use up grills and fenders at the terrific rate indicated by parts orders.

With our master order control, we also can advise distributors of any trends by the factory in backordering. When a part is continually backordered by the factory, we can find out why and pass along the information to the distributors. A backorder situation is uncomfortable for all concerned, but it eases things a bit if a dealer or car owner can be given the real reason for a delay. Our parts control system has kept backorders to a minimum.

Punched Tape

(Continued from page 142)

is accurately punched into the tape.

The punched tape and accounting machine's tally roll sheet go to the service bureau on Friday of each week. Reports from the service bureau are generally returned on Wednesday. These include a weekly report by four warehouses and by products. We receive a monthly report by territory, by product, and by salesman. The latter

For More Information Circle No. 425

report is important because one salesman may cover two or more territories.

The weekly report gives the figures we need for inventory relief. It breaks out sales by products, by size (gallons, quarts, pints, half pints) and by pounds. The monthly report breaks out over 800 different products to give us the complete sales picture instead of a few snapshot views. Thus we know what is being sold and where, and can determine where extra effort is needed.

To get this information, we punch into the tape the consecutive tracer number of the invoice; warehouse number; customer's number; and territory number. The quantity is identified by gallons, quarts and pints. Note that no dollar amounts are punched because we are not particularly concerned with the dollar value of the items in this analysis, only quantities. Dollar values could create distortion.

To produce these reports, about 8000 or 9000 punched cards a month, including credits, are created. The cards all carry 42 columns of punched information.

When we were installing the system, we did not have any trouble training operators. In fact, if an operator can use a typewriter and an adding machine, she should be able to pick up the rudiments of the accounting machine after only a few hours instruction. The tape punching is automatic.

Had we not installed the punched tape system, we would have been compelled to employ two additional office employees to keep up with our volume of work. Yet our equipment has greater capacity than we are presently using.

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News of the Office

IASA Annual Conference

The 38th International Conference of the Insurance Accounting & Statistical Assn., is scheduled for the Hotel Sherman, Chicago, May 15-18. Bob Richards, authority on sports, will be a featured speaker. The program will include panel and workshop sessions on life insurance, accident and health, group, debit, electronics, fire and casualty, fraternal, etc. An attractive program of entertainment has been arranged for the ladies. Exhibits will be open throughout the conference. Full details from IASA's secretary treasurer, L. J. Hale, Hotel Sherman, Chicago.

Western Computer Conference

The Western Joint Computer Conference at the Jack Tar Hotel, San Francisco, May 3-5, has for its theme, "The Challenge of the Next Decade." Robert M. Bennett Jr., IBM Research Laboratory, San Jose, and conference chairman, says the exhibits will be the largest and most diversified in the history of the conference.

Newsome Named SAM President

James E. Newsome was elected president of the Society for Advancement of Management at the annual meeting of the society's directors. Mr. Newsome, production manager for the Chicago plant of Johnson & Johnson, succeeds Dause L. Bibby, executive vice president of Remington Rand, who became board chairman. Others elected were: Robert B. Curry, controller, Southern Railway Co., Washington, D. C. as 1st vice president; David N. Wise, manager of applied research and engineering, Safety Products Div., Mine Safety Appliances Co., Pittsburgh, as 2nd vice president; Hezz Stringfield Jr., finance director, Union Carbide Nuclear Co., Oak Ridge, Tenn. as secretary; J. Gordon Campbell, secretary-treasurer, Canadian Ingersoll-Rand Co., as treasurer.

Government Accountants Meet

Nearly 2000 top management and accounting executives from all federal government agencies, as well as private industry, will attend a symposium and display of automatic data processing systems at the Statler Hilton Hotel, New York, May 23-24, according to the Federal Government Accountants Assn. Held annually for the past nine years, this will be the first such meeting in New York.

Coming NOMA Conferences

National Office Management Assn. announced that arrangements have been completed for its International Conference and Office Exposition in St. Louis, May 8-10, 1961; and San Francisco, May 21-23, 1962. A special national conference and exposition will be held in Atlanta, next Oct. 10-12.

Meeting Help Shortages

Almost all areas reported shortages or strong demands for well trained, competent secretaries, stenographers, typists, machine operators, bookkeepers and other office workers, according to the Bureau of Employment Security, U. S. Dept. of Labor. Local employment offices indi-

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NORD gives you DRY HANDLING and still copies all colors and all inks.

NORD Autoflow gives pin-point sharp reproduction every time. Every copy – the first or the thousandth – crisp clean, printed page sharp – from originals that are hand written, typed or printed, whether single pages or bound books . . . even photographs with tone and shade intact – on 15 different types of paper . . . including acetate.

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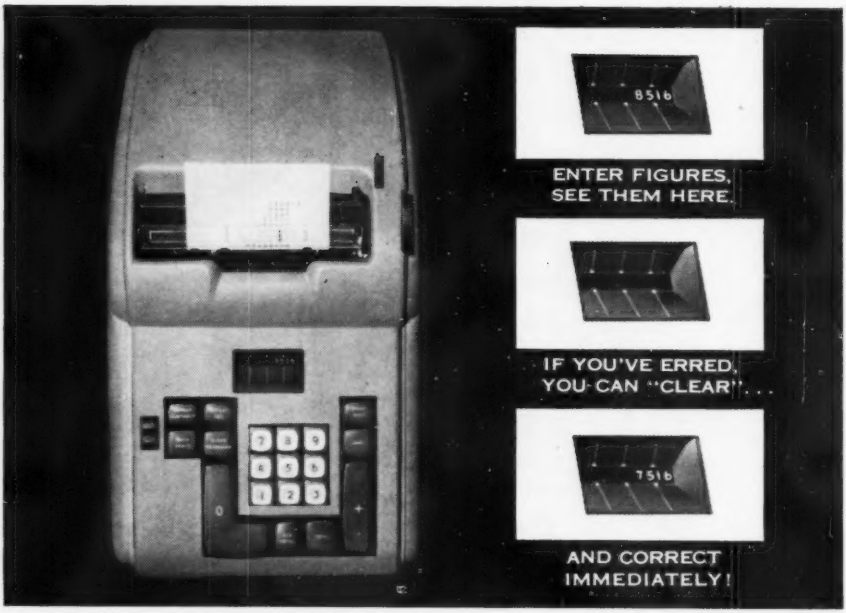
THE ADDING MACHINE THAT CATCHES ERRORS BEFORE THEY'RE MADE!



Friden's ACY actually catches errors before they're made. The exclusive Visual Check window shows a full registration of figures which have been entered while there is still time for their correction.

Further, the ACY has the exclusive Friden Natural Way keyboard, which is designed to fit the user's hand perfectly. Other features are the extra-wide platen for roll paper and wide forms; automatic red-printing of all negative values; all live control keys; special features for extra-rapid multiplication.

Now try the "next step" in adding machines. Call your Friden man or write to Friden, Inc., San Leandro, California.

THIS IS PRACTIMATION:
Automation so hand-in-hand with practicality there can be no other word for it.

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Friden

FRIDEN, INC., SALES, INSTRUCTION, SERVICE THROUGHOUT U.S. AND WORLD.

For More Information Circle No. 220

cated that this was magnified by restrictive employer hiring with respect to age, education, experience, marital status and appearance of workers. On the other hand, relaxation in job specifications was noted in a few areas. Charlotte, N. C., for example, indicated that most employers have eased job requirements, particularly with regard to age. In Boston, Racine, Wisc., and Portland, Ore., employers were reported hiring more part-time workers, particularly high school seniors and housewives, in the hope of inducing them to accept full-time work. Some Boston firms also have short evening shifts for machine tabulators and typists to relieve shortages. Shortened work weeks also are utilized as a recruitment device in some areas, particularly for clerks, typists, stenographers and other office help. In Boston, for example, local insurance firms have reduced their work week to 35 hours to attract job applicants and reduce turnover. Others in this area are paying time-and-a-half after 35 hours.

An Office Customs Survey

National Office Management Assn. has made an Office Customs Survey of more than 2300 companies in the U. S. and Canada. The survey revealed that the typical male office worker is expected to arrive at the office dressed in good taste, usually with a coat and tie, except in warm weather when he may be permitted to wear a sport shirt. If he's hungry, he may get a snack, usually during one of his two coffee breaks each day. If the female office worker smokes, she may have to confine it to the rest area during her coffee breaks. If she marries, she may continue at her job. If she becomes pregnant, may work for six months. Afterwards she may be assured of a position with her company, although she may have to start as a new employee.

Other trends were: 75% of the respondents permit male and female office employees to smoke in the office without restrictions; 65% still hold Christmas parties; 87% permit employees to receive personal mail in the office; 86% hire married women with pre-school children and 61% of these said women in this group are not absent more than other clerical employees. Coffee breaks or rest periods are granted by 80%; 58% of the companies surveyed do not reject employment application from spouses of present employees because of family relationship; 73% permit employees to receive incoming personal phone calls at all times, while 66% permit them to place outgoing personal calls without restrictions; 89% have no rules or restrictions on office dress; 40% pay for a summer picnic for office employees. Copies of the complete report are $1 each from NOMA, 1931 Old York Road, Willow Grove, Pa.

Summer Computer Courses

Courses in computer science and engineering will be held at the University of Michigan, June 13-24. Literature from Summer Conferences, 126 W. Engineering Bldg., University of Michigan, Ann Arbor.

World Census Training Handbook

For the past three years a joint team from the United Nations Organization and Food & Agriculture Organization in the Statistics Div. of FAO headquarters, Rome, has studied methods of sorting statistics and preparing tables from which conclusions can be easily drawn. The results are published in a "Handbook on Data Processing Methods" with 12 chapters, eight of which are now ready, covering data processing methods, planning and organizing services, design and location of source documents, coding techniques and punched cards. The eight chapters have been distributed to member countries for use in the 1960 World Census of Agriculture in about 100 countries and the 1960 World Census of Population. Charat K. Dilwali, head of the joint team, said many countries have spent large sums collecting census data but abandoned or reduced its analysis because they lacked trained manpower.

THE ONLY BOOK OF ITS KIND!

Includes:

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- GELATIN HECTOGRAPH DUPLICATING,
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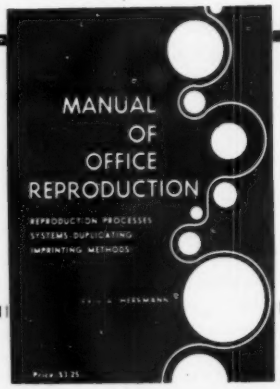
Over 200 pages of helpful information, and illustrations (including 100 pages of advertising by duplicator manufacturers, with Buyer's Guide index).

Describes all office reproduction and duplicating processes. Time-saving charts show at a glance which process to use for best results in any situation. Tells how to make the most economical use of whatever duplicating machines an office may now have — how to combine the advantages of one process with those of another to save time and money. Also tells when not to use certain methods.



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British Parliament

(Continued from page 87)

porters were assigned a bench of their own in the gallery.

Since 1908, the House of Commons has had its own official staff of reporters for *Hansard* and 18 reporters take turns in the House. At the end of his turn each reporter dictates from his shorthand notes to a typist. Revision of the typescript, including correction of grammatical mistakes, checking of figures and verification of quotations, is then carried out and this takes up as much as one to 1½ hours, according to the difficulty, for every ten minutes of reporting. Following revision, the typescript passes through the hands of a sub-editor who checks the continuity of the different reporters' turns, etc., and dispatches the pages by a relay of messengers to the printer for immediate action. So well organized are these operations that members residing in the London area (within four miles of the House of Commons) find the daily part waiting for them on their breakfast tables next morning. Members resid-

"Gentlemen, let's not allow our expansion to go to our heads."

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For More Information Circle No. 367

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Genuine ENGRAVED BUSINESS CARDS 500 $11 • 1000 $15

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DEALERS WANTED

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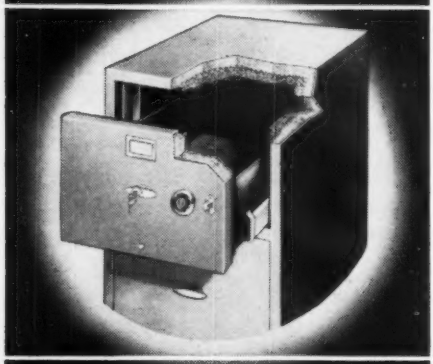
Office Ovens!



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For More Information Circle No. 357

ing outside the limit can pick up their copies at the House next day. Members are allowed to correct errors of their own or slips of the reporter, but cannot make alterations which would produce a meaning different from that of the original spoken word. Such corrections are submitted to the editor of *Hansard* for approval. The latter subsequently passes forward each daily part for inclusion in the bound volume.

Included in *Hansard* are all speeches, apart from those in wartime secret sessions, made in the House except the reporting of evidence taken before select committees. These usually sit in private, and reporting is done by the senior partner of a private firm, acting as official shorthand writer to both Houses.

The House of Lords has a number of offices corresponding to those described for the Commons. The library in the Upper House specializes particularly in legal subjects. The Lords' record office in Victoria Tower houses the journals and other historical documents belonging to both Houses dating back to 1497. Before then, the clerks of the parliaments, who were also chancery clerks, took their records back into chancery at the end of a session.

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For More Information Circle No. 358

Carpet in Offices

(Continued from page 98)

are quoted to the nearest dollar.

Surprisingly, under heaviest traffic and soil conditions, maintenance savings with carpeted floors are greatest. The main reason for this is carpet's tendency to sustain its appearance. It retards what is known as the "daily drop" better than non-carpeted surfaces. Researchers attribute this superior resistance to dirt to two of carpet's inherent characteristics: (1) it tends to brush soil from shoes, confining tracking effects to a limited area, and (2) its natural flexing action resists dirt by keeping it high in the pile where vacuuming can easily remove it.

Since dirt is not ground into the carpet surface, reducing its appearance, and since its beauty is not dependent on its gloss, the "daily drop" in appearance is consequently less. Even more important from the standpoint of maintenance cost, the effort needed to restore carpet to its original condition is *less* than is needed for non-carpeted areas.

ISC lists six main advantages afforded by carpeting in addition to cost-saving. These are divided equally between *physical* and *psychological* as follows:

PHYSICAL

- Quiet—virtually eliminates all floor noise.
- Safety—reduces slips and slides.
- Comfort—pile reduces "floor fatigue;" relieves cold at floor level.

PSYCHOLOGICAL

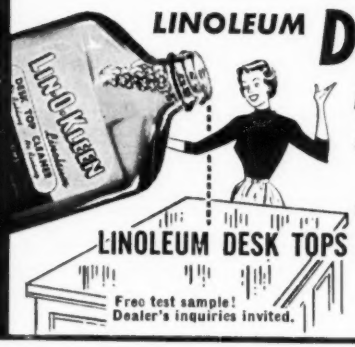
- Beauty—wide choice of color, texture and design; lends elegance.
- Luxury—contributes a feeling of quality and prestige.
- Warmth—imparts this and lends a more finished impression.

To sum up, these studies indicate that carpet has important sound absorption properties; that it can be a real acoustical tool for those concerned in planning and decorating offices; that, properly maintained, it is more economical in terms of wear, labor and cleaning materials.

FREE supply of Scott 2-ply wipers with sample or first order

NO FUSS—NO MESS When you use LINOLEUM

LIN-O-KLEEN Desk Top Cleaner



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1 Pint—$1.25 Doz. Pints—$12
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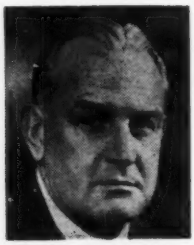
News of the Industry

Pitney Bowes Executives



W. H. Wheeler Jr.

H. M. Nordberg

The board of directors of Pitney-Bowes, Inc., elected Walter H. Wheeler Jr., for 21 years president of the company, chairman of the board and chief executive officer, and Harry M. Nordberg, executive vice president since 1957, president and chief operating officer. The combined post of board chairman and chief executive is a new one for Pitney-Bowes. Mr. Nordberg, the new president joined Pitney-Bowes as a salesman in 1934, and held branch and regional managerships before becoming assistant to the vice president for sales and service in 1945. He was named general sales manager in 1948, vice president for sales and service in 1950, executive vice president and a director in 1957. Mr. Wheeler joined the company when it started 40 years ago, and held production, sales and administrative posts before becoming president in 1939. Re-elected vice presidents were: William F. Bernart, engineering; Elwood M. Davis, sales and service; Fred T. Allen, manufacturing; Frederick Bowes Jr., international operations; John O. Nicklis, finance; John A. Strother, product planning; Joseph J. Morrow, personnel relations; Wilbur R. Greenwood Jr., government relations.

Underwood-Olivetti Purchase

Underwood Corp. and Olivetti Corp. of America have unanimously approved the purchase by Underwood of substantially all the assets of Olivetti Corp. of America, including its tangible property, its long-term, exclusive franchise to sell Olivetti products in the U. S. and Canada and its right to financial and technical assistance from its parent, Ing. C. Olivetti & C., S.p.A. Under the terms of the proposed acquisition, Underwood would issue 1,200-000 shares of its common stock in exchange for the assets, and in addition, would assume substantially all the liabilities and obligations of Olivetti Corp. of America. Underwood believes that the acquisition will provide the best available solution to the serious difficulties confronting the corporation. It is designed to provide Underwood with additional capital, management and technical personnel and to open to it, on an exclusive basis, a source of additional products which will enable it to meet increasing competition.

Anken Buys Photocopy Plants

Anken Chemical & Film Corp., Newton, N. J., has entered into an agreement with Sperry Rand Corp. for the purchase of the photocopy section of its photo records division of its Remington Rand

Thermofilmer!
A new machine
with
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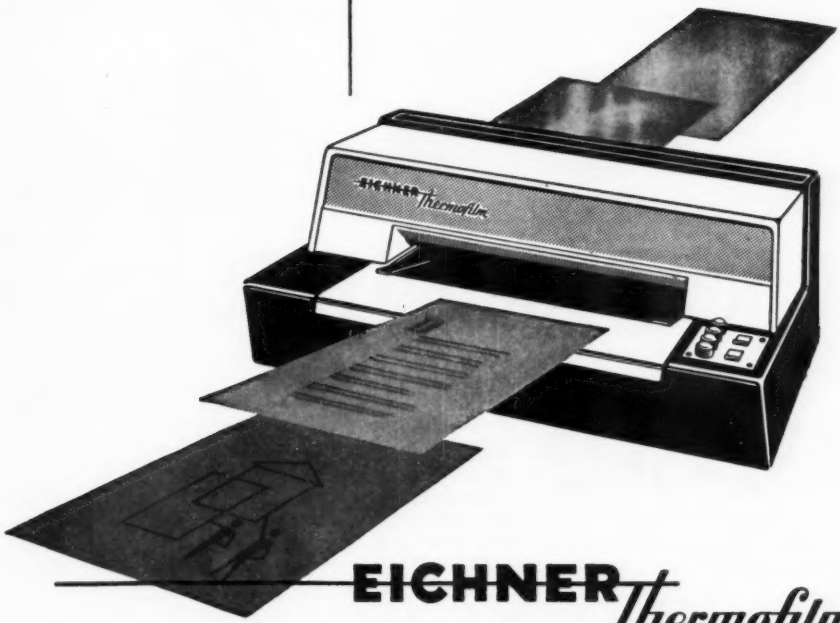

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QUALITY CONTROL. In an industry where individual skills and craftsmanship play so vital a role, the highest standards of workmanship can be maintained only by constant and continuous adherence to quality control procedures. Curtis-Young's fine reputation for quality products can be traced to the company's vigilance in this direction.

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Div., it was announced by Louis P. Ratti, president of Anken. The photocopy section produces and sells photographic materials for office photocopy machines, including Remington Rand's Dexigraph, Portagraph and Transcopy models. Anken will continue to manufacture these materials and also market the Dexigraph, Portagraph and Transcopy machines. It expects to continue the Remington Rand policy of selling these products directly to users. The facilities being purchased consist of two plants and related inventory. One plant is in Newton, and the other in Williamstown, Mass. The agreement provides for an aggregate purchase price of about $3,300,000, subject to inventory adjustments.

Mosler Marketing Director

George G. Cronin

Appointment of George G. Cronin as director of marketing for Mosler Safe Co. was announced by Edwin H. Mosler Jr., president. Mr. Cronin will be responsible for marketing activities for all divisions within the company as well as its four affiliates. In addition, the company's advertising, sales promotion and public relations departments will report to him. He joined the firm in 1947, was named manager of New York commercial sales in 1952, and later became assistant to the executive vice president. Prior to assuming his new position, he was eastern regional sales manager.

Remington Rand Vice President

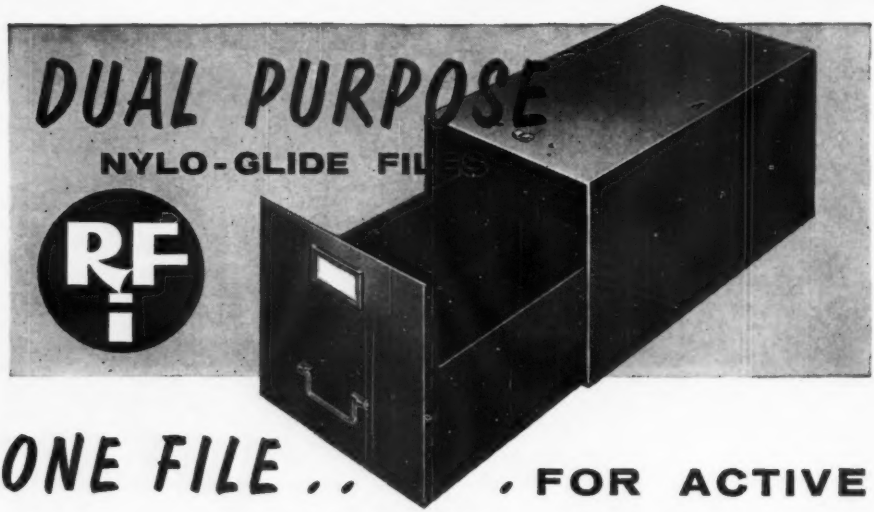
Robert D. Brown was named vice president and general manager of the Systems-Photo Records Div. of Remington Rand, Div., Sperry Rand Corp. Mr. Brown joined the company in 1940 as a salesman. In 1954, he was named assistant general sales manager of the division, and since last August has served as its general manager and director of marketing.

Globe-Wernicke Expands Sales

Harry C. Anderson

Elmer G. Rahe

Globe-Wernicke Co., Cincinnati, through its president and general manager, R. Herman Hammer, announced the expansion of its sales division. With more than 4000 products and the greatly increased business potential, it became virtually impossible for Globe-Wernicke's general line district sales managers to give adequate selling attention to the company's complete line of equipment, filing supplies and office accessories. So, more than a year ago, Harry C. Anderson, who was with the company from 1931 to 1944, rejoined as director of market and product development and cooperated in making comprehensive market studies. Two separate divisions were formed to meet current marketing conditions: an equipment sales division to handle steel products and a system sales division to specialize in filing supplies and office accessories. Each will operate separately with its own district sales managers. Elmer G. Rahe, vice president and board member, will direct the equipment sales division with Robert W. Sprott as the division's general sales manager. Harry C. Anderson was elected vice president-sales-systems. In addition to his sales activities, he will coordinate product development and manufacturing of filing supplies and office accessories. William C. Aylward, formerly manager of the systems department, was promoted to general sales manager for this division.



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You can't see all of the quality that is built into NYLO-GLIDE Steel Record Files, but year after year of faultless service will prove to you that no finer file was ever built.

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As attractive as they are functional. Designed and fabricated by craftsmen, and finished with care of the finest materials; NYLO-GLIDE Files present an appearance that blends harmoniously with the decor of any office. You'll have to see these files to fully appreciate their quality and utility.

RFI RECORD FILES INC. WOOSTER, OHIO

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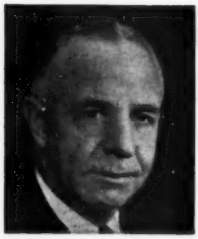
Senior Vice Presidents



H. C. Davis

Carl McKelvy

H. C. Davis and Carl McKelvy were elected senior vice presidents of Royal McBee Corp., Philip M. Zenner, president, announced. Mr. Davis directs all marketing activities and Mr. McKelvy is responsible for all production, research and development operations. Both are members of the board of directors. Mr. Davis, with the company for 30 years, is also president and a director of McBee Co., Ltd., Toronto, a member of the board of directors of Royal Typewriter Co., Ltd., Montreal, and of Royal Precision Corp. Mr. McKelvy, with the company since 1946, is also a director of Royal Typewriter Co., Ltd., Royal Precision Corp., Instrument Development Laboratories, Inc., Veeder-Root, Inc., and Dime Savings Bank of Hartford, Conn.

Seeks U. S. Manufacturer

A new Facit electronics company was formed in Sweden as a subsidiary of AB Atvidabergs Industrier, producers of the Facit office machine line, Karl Siewert, president of Facit, Inc., reports. For some years, the Swedish company's electronic department has done extensive research and manufactured electronic computors and data processing machines. A recent development is their carousel type of magnetic tape memory. The company also produces a compact, reliable, easy-to-operate tape punch and a tape reader. Growing demand for this equipment has necessitated construction of a five-story

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For More Information Circle No. 420

factory located outside Stockholm, but it is as yet impossible to meet demands of the U. S. market for all products. So C. Bertil Nystromer, president of the Facit electronics firm, is here studying the possibility of producing and selling the equipment in this market. Several American manufacturers have visited the Swedish plant and Mr. Nystomer reports their interest is gratifying. For further information contact Karl Siewert, Facit, Inc., New York.

Heads Curtis-Young Research

Arthur Young, president, Curtis-Young Corp., announced the appointment of Joseph A. Bichrest as chief chemist and director of research. Prior to joining Curtis-Young, Mr. Bichrest was for 11 years with Carter's Ink Co. as a chemist in the carbon paper and inked ribbon department—and for five years chief chemist in the carbon paper department of Standard Register Co., Dayton, Ohio.

J. A. Bichrest

Papercraft Purchases LePage's

Papercraft Corp. has announced purchase of the physical assets in the U. S. of the LePage's Div. of Johnson & Johnson. The assets of the 78-year-old LePage's include large plant facilities on its own 62-acre site. Major products are cellophane tape and other pressure sensitive tapes, and consumer adhesives. The new property will operate as a division of Papercraft through its network of sales executives and field representatives. Sales headquarters will be in Pittsburgh.

Dashew Acquires Duplicard

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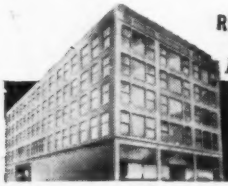

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it can be removed from one office to another
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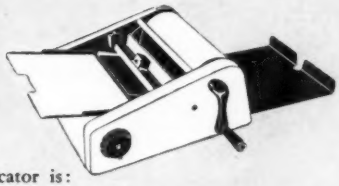

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- light
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- the spirit is hermetically contained in the suitable tank

Your secretary will use it with pleasure, without any difficulty
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easy to operate adjustable for printing on any range of paper
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6 MODELS:
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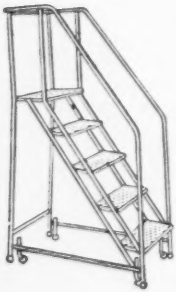

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For More Information Circle No. 419

distribution, were approved by the board of directors of Dashew Business Machines, Inc., according to Stanley Dashew, president. Acquired was the Duplicard Co., of Santa Ana, with a line of 13 machines in the data processing field to be marketed under the trade name of Dashew Transfer Printer. Robert Williams, president of Duplicard, will remain with the subsidiary company in a consultant capacity.

Transfer Printers write on forms, envelopes, checks and mailing pieces directly from punched cards or 3" x 5" cards. Dashew is expanding facilities of Duplicard, and has programed the production of 150 machines this month, increasing to 600 machines by next April. Ralph Hedley is general manager of the Transfer Printer Dept.

Smith-Corona Consolidation

Smith-Corona Marchant Inc. will consolidate all of its typewriter operations in its Cortland and Groton, N. Y., plants, it was announced by Emerson E. Mead, executive vice president. Manufacturing operations at the Syracuse plant will be moved to the Cortland-Groton plants.

Photostat Renews Contract

Kenneth M. Leghorn, president, Photostat Corp., Rochester, N. Y., announced the signing of a new five-year contract with Whitin Machine Works to continue the manufacture of the Photostat Offset Duplicator. The Rochester firm first entered into a sales distribution agreement with Whitin in February, 1957.

TCMA Associate Memberships

To increase technical cooperation between tabulating card manufacturers and their suppliers, the Tabulating Card Manufacturers Assn. has inaugurated an associate membership for manufacturers of tab card machinery, instrument makers and suppliers, and manufacturers of stock, ink, cartons and other tab components. The purpose is to maintain close liaison

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with tabulating card manufacturers on technical problems and determine the needs of the industry for product development. J. M. K. Davis, president, Connecticut Printers, Inc., was elected president of TCMA for 1960. Elected vice president was M. G. Lewis, Lewis Business Forms, Inc. Next general meeting will be in Chicago, June 16.

Anken Sales Director

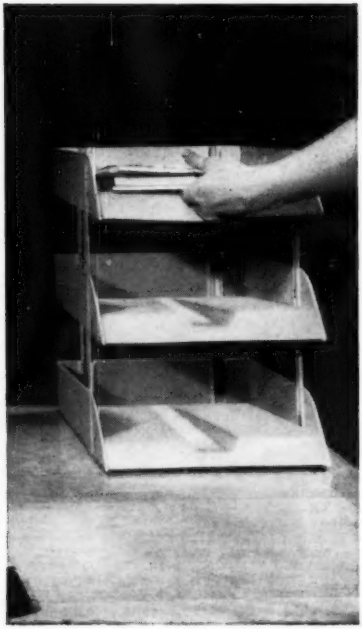
J. B. Magruder Jr.

Anken Chemical & Film Corp. announced the appointment of J. B. Magruder Jr. to director of sales for Anken and all subsidiary companies. This appointment was made to further Anken sales organization and build additional sales volume. Mr. Magruder was formerly with American Photo Copy Equipment Co. as regional assistant national sales manager and eastern divisional sales manager.

Richard Gibian, Inc., Expands

Oscar Shoenfeld

Oscar Schoenfeld, former representative of Olympia typewriters in the New York area, has joined Richard Gibian, Inc., 128 Lafayette St., New York, as vice president. Mr. Schoenfeld was with the Olympia organization since 1956. Prior to that, he was Hermes representative in the metropolitan area. Before joining Hermes he was with Remington Rand for seven years as a retail typewriter salesman and supervisor in charge of training retail typewriter salesmen in New York. Gibian, having specialized up to



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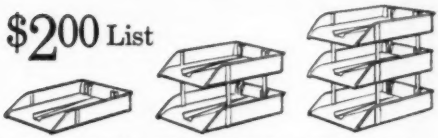

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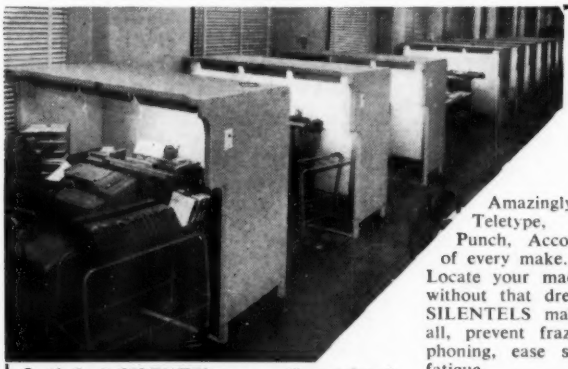

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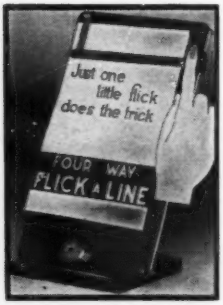

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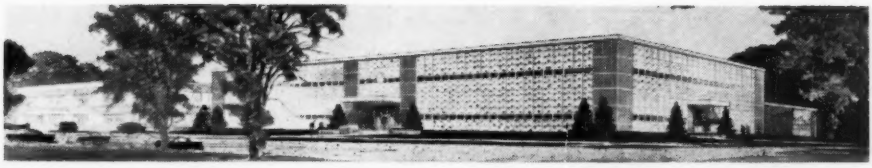

Construction began May 1 on this general administration building for Nekoosa-Edwards Paper Co., at Port Edwards, Wis. Building has two stories and basement with 75,000 sq. ft. of floorspace. First floor will be for accounting, data processing, industrial relations; second for advertising, sales, traffic, executive offices, conference rooms.

now in the wholesale export of bookkeeping machines, will expand its activities in domestic wholesale bookkeeping and calculating machines and will also develop its retail business in the New York area. The expanded firm invites dealer inquiries in these lines.

Ozalid Names Managers

Howard F. Bailey and Hazen G. Hunt were named manager-marketing administrative services and manager-distributor operations respectively of Ozalid Div., General Aniline & Film Corp. The announcement was made by James A. Travis, Ozalid manager-marketing.

Datagraphic Buys Microfilm Co.

Acquisition by Datagraphic Systems, Inc., of the Microfilm Co. of Calif., was announced by Gerald E. Donovan, recently named Datagraphic president. Russell S. Ellsworth, Datagraphic's vice president of sales and service, will head Microfilm Co. as president. Francis A. Nivens was elected vice president and general

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by RAY MARIEN, Forms & Procedures Mgr.
Olin Mathieson Chemical Corp., New York.

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manager of Datagraphic. Mr. Donovan, who succeeds Matthew M. Gouger as Datagraphic's president, retains his present position as vice president of finance at Douglas Aircraft Co. Microfilm, previously owned by Theodore Zolla and John A. Scharlin, will continue to maintain its identity, functions and services at 1977 S. Los Angeles St., in that city.

Paillard-Precisa Partnership

Paillard Ltd., manufacturer of Hermes typewriters, Yverdon, Switzerland, and Precisa Ltd., manufacturer of Precisa calculating machines, Zurich, have entered into partnership. This move has been favored by the directors of both companies to help solve the increasing problems of research, production and distribution manufacturers of office machines are confronted with. Moreover, the fact that Hermes and Precisa products complement each other will, it is hoped, contribute to strengthening their position in world markets.

Frye's Eastern Plant

Frye Mfg. Co., Des Moines, producer of one-time carbon papers, announced that it will establish an eastern branch factory near Newburgh, N. Y. The company will construct a 40,000 sq. ft. plant in

The All-In-One carbon paper storage box of Kee Lox Mfg. Co. received an award for excellence from the National Paper Box Manufacturers Assn.

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For More Information Circle No. 464

New Windsor, a mile south of Newburgh, at an approximate cost of $300,000. It will be a single story design, on a five-acre site. Robert Barkus will be plant manager. Officers of the 46-year-old company are: Marion C. Frye, president; Hiram A. Myers, executive vice president; and Robert P. Keehn, treasurer. Southeastern Carbon Paper Co., a Frye affiliate, operates a plant in Decatur, Ga.

NBFA Committee Chairmen

National Business Forms Associates recently ended a directors meeting at Bal Harbour, Fla., where reports of the newly formed national committee chairmen were featured. The committees were formed to keep pace with the fast growing industry and to keep abreast of the latest techniques. Committee chairmen are: Robert Allen, New Haven, Conn.; Grady Conrad, Winston-Salem, N. C.; Robert Seipp, Coral Gables, Fla.; Karl Edelmayer, Philadelphia; Bill Brown, Trenton, N. J.; Harold Wood, Chicago; William Ferguson, Buffalo; W. L. Burnett, Memphis; Chas. C. Tingle, Indianapolis. NBFA headquarters are at Ft. Lauderdale, Fla. J. H. Harris, Harris Business Forms Co., Moline, Ill., is president.

Cornwell Joins Royal McBee

Appointment of Wallace L. Cornwell as manager of sales training and development of Royfax photocopy equipment and supplies, was announced by J. T. Dessureau, national sales manager, Roytype Supply Dept., Royal McBee Corp. Prior to his new assignment, Mr. Cornwell had for many years been associated with a competitive firm where he served as national sales manager of the photo records department.

Brand Name Retailer-of-the-Year

D. Waldner Co., Mineola, N. Y., is Brand Name Retailer-of-the-Year, according to Henry E. Abt, president, Brand Names Foundation, Inc., sponsors of the yearly competition which includes 26 retail classifications.

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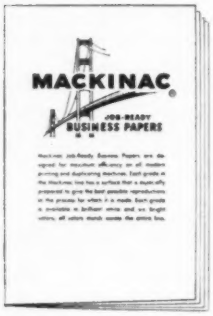

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National Conference & Exhibit Calendar

Assn. of Records Executives & Administrators, Park-Sheraton Hotel, New York, May 2.

National Assn. of Educational Buyers, Pittsburgh Hilton Hotel, Pittsburgh, May 2-4.

Western Joint Computer Conference, San Francisco, May 3-5.

U. S. World Trade Fair, Coliseum, New York, May 4-14.

Insurance Accounting & Statistical Assn., Sherman Hotel, Chicago, May 15-18.

American Society for Personnel Administration, Statler Hilton Hotel, New York, May 16-18.

Operations Research Society, Statler-Hilton Hotel, New York, May 18-20.

National Society for Business Budgeting, Netherland Hilton Hotel, Cincinnati, May 19-20.

Federal Government Accountants Assn., Statler Hilton Hotel, New York, May 23-24.

Controllers' Congress, National Retail Merchants Assn., Hilton Hotel, Pittsburgh, May 30-June 3.

Institute of Internal Auditors, Schroeder Hotel, Milwaukee, June 12-15.

National Assn. of Accountants, Roosevelt Hotel, New Orleans, June 19-22.

National Machine Accountants Assn., San Francisco, June 22-24.

National Office Machine Dealers Assn., Coronado, Calif., July 10-13.

National Secretaries Assn., Hilton Hotel, Pittsburgh, July 20-23.

National Society of Public Accountants, Muehlebach Hotel, Kansas City, Mo., Aug. 22-26.

Assn. for Computing Machinery, Marquette University, Milwaukee, Aug. 23-25.

National Business Forms Associates, Chase Park-Plaza Hotel, St. Louis, Sept. 14-17.

National Stationery & Office Equipment Assn., Conrad Hilton Hotel, Chicago, Sept. 24-28.

American Institute of Certified Public Accountants, Bellevue-Stratford & Sheridan Hotels, Philadelphia, Sept. 25-28.

National Assn. for Bank Audit, Control & Operation, Statler Hotel, Los Angeles, Oct. 10-12.

Systems & Procedures Assn. of America Commodore Hotel, New York, Oct. 10-14.

American Records Management Assn., Plankinton House, Milwaukee, Oct. 19-22.

Controllers Institute of America, Fairmont Hotel, San Francisco, Oct. 22-26.

National Institute of Governmental Purchasing, Shoreham Hotel, Washington, D. C., Oct. 23-26.

National Business Show, Coliseum, New York, Oct. 24-28.

Office Equipment Manufacturers Exhibits, Memorial Sports Arena, Los Angeles, Nov. 1-4.

Society of Reproduction Engineers, Sherman Hotel, Chicago, Dec. 3-6.

OFFICE EXHIBITS ABROAD

National Office Management Assn., Montreal, Canada, May 22-26.

Canadian National Business Show, Toronto, June 6-8.

Life Office Management Assn., Royal York Hotel, Toronto, Canada, Sept. 26-28.

Business Efficiency Exhibition, Olympia, London, Oct. 2-11.

Electronic Computer Exhibition, Olympia, London, Oct. 4-12.

International Office Equipment Exhibit, (S.I.C.O.B.), Paris, Oct. 14-23.

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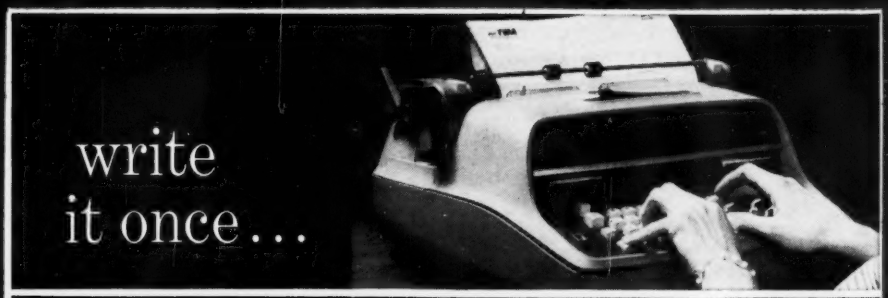
As We See It...

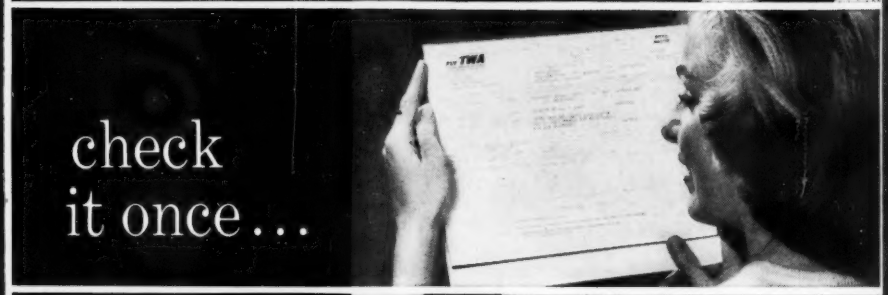
A healthy controversy among computer manufacturers developed last month with claims and counterclaims to leadership of the new second generation, solid state (all-transistorized) data processing systems.

This development is a boon to management as it focuses attention on the increasing availability of such systems. This availability extends through small, medium and large sized categories where monthly rentals vary from $1000 to the ultrasophisticated systems as high as $50,000 and over a month. If you wish to plunk down cash and buy outright, the respective prices range from $25,000 to $2-1/2 million.

There are now over a dozen famous manufacturers in the computer battle. The growth of the market for electronic data processing is beginning to fulfill its dramatic prophecies. Its impressive magnitude can be seen in last month's statement by RCA president, John L. Burns, that within a decade his company expects to deliver electronic computers whose value will equal the present total of all RCA products, which is now nearly $1-1/2 billion. The 1959 approximation for the entire computer industry is $1 billion.

Other leaders in data processing claim further innovations will eliminate up to three-fourths of many categories of clerical work. Certainly new fields of applications are announced daily, from mobilization of the Marines to improved methods of figuring surface areas. These are exciting times for businessmen with a sense of history and appreciation of change.





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For More Information Circle No. 273

June 1960